

TRUST & CONFIDENCE

Εμπιστοσύνη & Αξιοπιστία

**The Most Important Reform is Winning the
Trust & Confidence (Εμπιστοσύνη & Αξιοπιστία)
of Taxpayers and the Global Capital Markets**

**Paul B. Kazarian
JAPONICA PARTNERS
THE CHARLES & AGNES KAZARIAN FOUNDATION**

American-Hellenic Chamber of Commerce
27th Annual The Greek Economy Conference
Athens, 28 November 2016



AMERICAN-HELLENIC
CHAMBER OF COMMERCE

TRUST & CONFIDENCE

Εμπιστοσύνη & Αξιοπιστία

- **Section A.** Five Minutes of **Background Information**
- **Section B.** **Best Practices** for Governments Winning Trust & Confidence (Εμπιστοσύνη & Αξιοπιστία)
- **Section C.** **Worst Practices** for Governments Winning Trust & Confidence (Εμπιστοσύνη & Αξιοπιστία)
- **Section D.** Necessary **First Step** to Winning Trust & Confidence (Εμπιστοσύνη & Αξιοπιστία)

Quick Facts on Japonica and Kazarian

- **Japonica Partners:** Founded 1988. Our core competency is investing in and then rejuvenating (turning around) multinational conglomerates.
- **Core Competency:** Our core competencies include improving our employee performance and providing our stakeholders with best-in-class disclosure of our financial performance
- **Investor in Greece:** Since summer of 2012, a large (one of largest) private investor in Greek government bonds.
- **Four Years of Team Building:** Over past four years we have built a team of over 100 professionals focused on improving government balance sheet management.
- **2016 Professional Recognition on Government Balance Sheet Management and Disclosure:**
 - Awarded the 2016 William Pitt the Younger Award for our work in strengthening democracy through government financial management.
 - Appointed Sole Special Advisor to the CEPS EU Member State Government Balance Sheet Task force.

Over 250 Presentations on Government Balance Sheet Management and Disclosure

Conference presentations, videos, and agendas can be found at www.MostImportantReform.info.

| SN | Conference | Date | Location |
|----|--|---|---------------------|
| 1 | British Hellenic Chamber of Commerce/LSE 11th Annual Conference | 14 Nov 2016 | London, UK |
| 2 | Public Financial Management Challenges for Portugal - ISCTE Portugal | 20 Oct 2016 | Lisboa, Portugal |
| 3 | The Accountant & International Accounting Bulletin Conference and Awards | 6 Oct 2016 | London, UK |
| 4 | CEPS Balance Sheet Task Force | 24 Jun 2016 | Brussels, Belgium |
| 5 | Institute for New Economic Thinking Oxford Wealth Conference | 20 Jun 2016 | Oxford, UK |
| 6 | European Federation of Accountants Public Sector Roundtable | 15 Jun 2016 | Brussels, Belgium |
| 7 | London Business School | 3 Jun 2016 10 Dec 2015 | London, UK |
| 8 | University of Southern California Global Leadership Summit | 29 Apr 2016 | Los Angeles, USA |
| 9 | e-Kyklos | 12 Apr 2016 | Athens, Greece |
| 10 | Centre for European Policy Studies Ideas Labs | 26 Feb 2016 | Brussels, Belgium |
| 11 | University of Piraeus | 7 Dec 2015 | Athens, Greece |
| 12 | American-Hellenic Chamber of Commerce Annual Greek Economy Conferences | 30 Nov 2015 2 Dec 2014 1 Dec 2013 | Athens, Greece |
| 13 | Project Management Institute Greece Congress | 5 Nov 2015 | Athens, Greece |
| 14 | CESifo Re-Thinking Sovereign Debt Summit | 8 Jul 2015 | Munich, Germany |
| 15 | CIPFA Annual Conference | 7 Jul 2015 | London, UK |
| 16 | European Group for Public Administration Spring Workshop | 7 May 2015 | Zurich, Switzerland |
| 17 | CESifo/Süddeutsche Zeitung Munich Lecture | 27 Apr 2015 | Munich, Germany |
| 18 | International Federation of Accountants Roundtable | 15 Apr 2015 | Washington, DC, USA |
| 19 | Forbes Banking and Insurance Forum | 27 Mar 2015 | Athens, Greece |
| 20 | OECD Public Sector Accruals Symposium | 27 Feb 2015 | Paris, France |
| 21 | Standard & Poors/Institute of International Finance Executive Program on Sovereign Risk Management | 11 Nov 2014 | New York, NY |

Section A.

**Five Minutes of Background
Information**

To Win Trust & Confidence Governments Must Disclose their **Consolidated Balance Sheet** Using Internationally Comparable and Verifiable Standards

- **Taxpayers** give their hard earned money to governments and want to know how it is managed.
- The **global capital markets** loan money, for which they are most often fiduciaries, to governments and want to monitor their investments.

Market Forces Profit from Loss of Trust & Confidence in Governments

Hedge funds:

- Increases trading profits
- Increases frequency of trading
- Create relational profit anomalies
- Improves CDS profit opportunities

Investment Banks:

- Wider bid-ask spreads
- Increases the price of liquidity
- Increases trading commissions

Media

- Volatility sells papers and generates profitable internet activity

A Growing Consensus as to the Reasons Governments Will Not Publish a Balance Sheet in Accordance with International Standards

- #1. Exposes hidden **vote buying**
- #2. Exposes **incompetence**
- #3. Don't want to be compared based on **financial facts**
- #4. Don't want to be held **accountable** for financial underperformance
- #5. Exposes **corruption**
- #6. **Many fake representations** of government balance sheets

Primer Balance Sheet Comparison: International Accounting Standards vs. Statistics Versus Cash/Modified Cash

| <u>SN</u> | <u>Traits</u> | <u>International Accounting Standards</u> | <u>Statistics</u> | <u>Cash/Modified Cash</u> |
|-----------|--|---|-------------------|-------------------------------|
| 1. | Faithfully Represent Economic Reality | Yes | No | No |
| 2. | Internationally Comparable | Yes | No | No |
| 3. | Consolidated Balance Sheet | Yes | No | No |
| 4. | Auditable | Yes | No | No |
| 5. | Independently Audited | Yes | No | No |
| 6. | Fully Integrated Financial Statements | Yes | No | No |
| 7. | Detailed Disclosure | Yes | No | No. |
| 8. | Revisions as Exceptions | Yes | No | No |
| 9. | Accrual | Yes | Varies | No |

The Focus on **Headline Debt (FFV)** and Cash Deficits Cultivates Destructive Short-Termism and Misleading Reporting Schemes: Examples

- Focus on debt at future face value (FFV) and cash balances are two of the **most easily manipulated** financial numbers.
- Focus on FFV **ignores changes in Taxpayers' Equity**, which is vastly more meaningful.
- Focus on cash balances increases pressure to **spend more money on vote buying** (consumption) and less on capital expenditures (e.g., infrastructure).
- Focus on FFV and cash **increases pressure to sell government assets** rather than increase value through better management.

Cash and Modified Cash are the Easiest Numbers to Manipulate to Misrepresent Economic Reality

- Delaying payments under contractual obligations.
- Entering into contracts to delay payment obligations.
- Accelerating future payment obligations at significant discounts.
- Booking asset sales as cash inflows without recognizing loss of assets.
- Non-recognition of contractually acquired contingent liabilities.

Basic Financial Facts about the **Massive Size** of the Greece Government

- The Greek government **does NOT have a balance sheet** prepared according to internationally agreed upon standards.
- But, our team's estimate is that Greece government consolidated **balance sheet of ½ Trillion Euros or €47,400 per citizen.**
- **€90 billion** plus per year in government expenditures
- **600,000** employees
- **47%** of economy

Section B.
Best Practices for
Governments Winning
Trust & Confidence
(Εμπιστοσύνη & Αξιοπιστία)

Section B. Best Practices

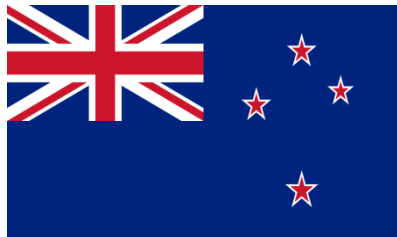
1. Debt: IPSAS/IFRS
2. Correctly using ESA 2010 Section 20.236 and 2008 SNA 22.110
3. Balance Sheet Net Debt
4. Debt Service
5. Consolidated Balance Sheet
6. Three Basic Decision-Making Tools

Section B. Best Practices

1. Debt: IPSAS/IFRS

Government Benchmarks with Financial Statements Prepared in Accordance with International Accounting Rules

NZ



IPSAS

UK



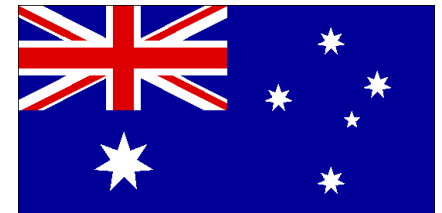
IFRS

CA



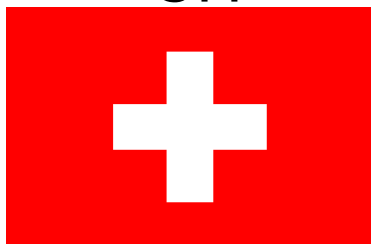
IPSAS-like

AU



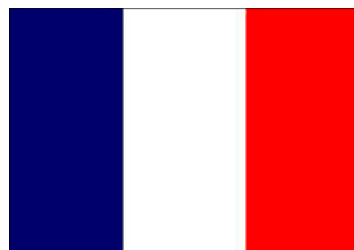
IFRS-like

CH



IPSAS

FR



IPSAS/IFRS

IL



IPSAS

US



US GAAP

New Aspiring Government Benchmarks with Financial Statements Prepared in Accordance with International Accounting Rules

AT



IPSAS

EE



IPSAS

IE



IPSAS

PH



IPSAS

PT



IPSAS

RO



IPSAS

SK



IPSAS

ES



IPSAS

Public Sector Benchmarks with Financial Statements Prepared in Accordance with International Accounting Rules



European Union
IPSAS



IFRS



IFRS



US GAAP



IPSAS



IPSAS

Greece and Peer Balance Sheet Debt and Net Debt (IPSAS/IFRS): 2015

(€, Billions)

| | | <i>Working Draft Estimate</i> | | | | |
|----|-------------------------------|-------------------------------|----------------|----------------|-----------------|--------------|
| | | <u>Greece</u> | <u>Ireland</u> | <u>Italy</u> | <u>Portugal</u> | <u>Spain</u> |
| 1. | Balance Sheet Debt | € 125 | € 190 | € 2,172 | € 208 | € 1,054 |
| 2. | Financial Assets | € 45 | € 76 | € 328 | € 66 | € 312 |
| 3. | Balance Sheet Net Debt | € 80 | € 114 | € 1,844 | € 142 | € 742 |
| 4. | GDP | € 176 | € 215 | € 1,636 | € 179 | € 1,081 |
| 5. | Balance Sheet Debt / GDP | 71% | 88% | 133% | 116% | 97% |
| 6. | Financial Assets / GDP | 25% | 35% | 20% | 37% | 29% |
| 7. | Balance Sheet Net Debt / GDP | 45% | 53% | 113% | 79% | 69% |
| 8. | Future Face Value of Debt | € 312 | € 201 | € 2,172 | € 231 | € 1,072 |
| 9. | Future Face Value / GDP | 177% | 94% | 133% | 129% | 99% |

Notes: Balance sheet debt estimates as of August 2016 prepared under the direction of Japonica Partners according to IPSAS/IFRS based on publicly available sources including EC, EFSF, ESM, IMF, and Bloomberg data. Financial asset data from Eurostat as of October 2016.

IPSAS 29 / IFRS 39: Highlights

“No material differences” between the standards on the below.

Objective: improves decision-making, increases transparency, strengthens accountability, and facilitates global comparability.

1. Initial Recognition

- **Fair value** of debt is market value (confirming arm's length) at date of event.
- **Market price/YTM** or most comparable market price/YTM.
- **If necessary**, PV with maximum use of observable/prevaling market YTM.

3. Concessionary Loans and Grants

- **Fair value** measurement.
- Recognized existence of **non-exchange transaction** as a subsidy.

3. Substantial Modification

- If PV of cash flows is at least 10% different from PV of original financial liability.
- All financial liabilities utilize the **same market based principles**.

4. Subsequent Measurement: At amortized cost using **EIR method** accretion.

IFRS 39 Passed **by EC Parliament**

The EC made the IFRS debt measurement standards **mandatory for all companies** listed on major stock exchanges in the EU from 2005. Commission Regulation (EC). No.1864/2005 of 15 November 2005.

Section B. Best Practices

2. Correctly using ESA 2010 Section 20.236 and 2008 SNA 22.110.

ESA 2010: Legal Status and Central Framework in EU

“To ensure that the concepts, methodologies, and accounting rules set out in this volume are strictly applied, it has been decided, following a proposal from the Commission, **to give it a solid legal basis.**” ESA 2010 was thus **adopted in the form of a regulation** of the European Parliament and the Council dated 21 May, 2013. Page iii.

“The ESA 2010 therefore serves as the **central framework for reference for the social and economic statistics** of the EU and its member states.” ESA 2010 Page 2.

“Reporting the **economic reality** where it is different from the legal form is a fundamental accounting principle to give consistency and to make sure that transactions of similar type will produce similar effects on the macroeconomic accounts, **irrespectively of the legal arrangements.**” ESA 2010 Page 440.

ESA 2010 Rules Specify that **Restructured Debt is Extinguished and Revalued** at Transaction Value

ESA 2010 Debt operations

20.221 Debt operations can be particularly important for the general government sector, as they often serve as a means for government to provide economic aid to other units. The recording of these operations is covered in Chapter 5. The general principle for any cancellation or assumption of debt of a unit by another unit, by mutual agreement, is to recognise that there is a voluntary transfer of wealth between the two units. This means that the counterpart transaction of the liability assumed or of the claim cancelled is a capital transfer. No flow of money is usually observed, this may be characterised as a capital transfer in kind.

Other debt restructuring

20.236 Debt restructuring is an agreement to alter the terms and conditions for servicing an existing debt, usually on more favourable terms for the debtor. The debt instrument that is being restructured is considered to be **extinguished and replaced** by a new debt instrument with the new terms and conditions. If there is a difference in value between the extinguished debt instrument and the new debt instrument, it is a type of debt cancellation and a capital transfer is necessary to account for the difference.

Chapter 5: Valuation

5.19 Financial transactions are recorded at **transaction values**, that is, the values in national currency at which the financial assets and/or liabilities involved are created, liquidated, exchanged or assumed between institutional units, on the basis of commercial considerations.

5.20 Financial transactions and their financial or non-financial counterpart transactions are recorded at the same transaction value. There are three possibilities:

(c) neither the financial transaction nor its counterpart transaction is a transaction in cash or via other means of payment: the transaction value is the current market value of the financial assets and/or liabilities involved.

5.21 The transaction value refers to a specific financial transaction and its counterpart transaction. In concept, the transaction value is to be distinguished from a value based on a price quoted on the market, a fair market price, or any price that is intended to express the generality of prices for a class of similar financial assets and/or liabilities. However, in cases where the counterpart transaction of a financial transaction is, for example, a transfer and therefore the financial transaction may be undertaken other than for purely commercial considerations, the transaction value is identified with the current market value of the financial assets and/or liabilities involved.

2008 SNA Statistical Framework

Produced by Five NGOs

“It [2008 SNA] has been **produced and is released under the auspices** of the United Nations, the European Commission, the Organization for Economic Co-operation and Development, the International Monetary Fund, and the World Bank Group.”
Forward.

“At its fortieth session, the Statistical commission **unanimously adopted** the 2008 SNA as the international statistical standard for national accounts. We **encourage all countries** to compile and report their national accounts on the basis of the 2008 SNA **as soon as possible**.” Signed by BAN Ki-Moon, UN; BARROSO Jose Manuel, EC; GURRIA Angel, OECD; STRAUSS-KAHN Dominique, IMF; and ZOELLICK Robert B, World Bank. Forward.

Five Signatories to System of National Accounts (2008 SNA), including the European Commission and the IMF

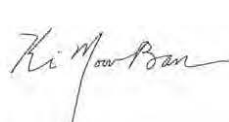
Foreword

The *System of National Accounts, 2008* (2008 SNA) is a statistical framework that provides a comprehensive, consistent and flexible set of macroeconomic accounts for policymaking, analysis and research purposes. It has been produced and is released under the auspices of the United Nations, the European Commission, the Organisation for Economic Co-operation and Development, the International Monetary Fund and the World Bank Group. It represents an update, mandated by the United Nations Statistical Commission in 2003, of the *System of National Accounts, 1993*, which was produced under the joint responsibility of the same five organizations. Like earlier editions, the 2008 SNA reflects the evolving needs of its users, new developments in the economic environment and advances in methodological research.

A working group, comprising representatives of each of our organizations, managed and coordinated the work. National statistical offices and central banks from countries throughout the world made valuable contributions. Expert groups carried out research on the issues being reviewed. An advisory expert group was established to provide expert opinions from a broad range of countries. During the update work, the recommendations and the updated text were posted on the website of the United Nations Statistics Division for worldwide comment, thereby achieving full transparency in the process.

The 2008 SNA is intended for use by all countries, having been designed to accommodate the needs of countries at different stages of economic development. It also provides an overarching framework for standards in other domains of economic statistics, facilitating the integration of these statistical systems to achieve consistency with national accounts.

At its fortieth session, the Statistical Commission unanimously adopted the 2008 SNA as the international statistical standard for national accounts. We encourage all countries to compile and report their national accounts on the basis of the 2008 SNA as soon as possible.



BAN Ki-moon
Secretary-General
United Nations



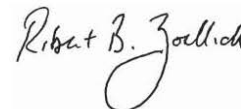
José Manuel Barroso
President
European Commission



Angel Gurría
Secretary-General
Organisation for Economic
Co-operation and
Development



Dominique Strauss-Kahn
Managing Director
International Monetary Fund



Robert B. Zoellick
President
The World Bank Group

2008 SNA Rules Specify that **Restructured Debt is Extinguished and Revalued** at Transaction Value

Debt reorganization

22.106 There are four main types of debt reorganization:

- b. Debt rescheduling or re-financing. A change in the terms and conditions of the amount owed, which may result or not in a reduction in burden in present value terms.

Debt rescheduling and refinancing

22.109 Debt rescheduling (or refinancing) is an agreement to alter the terms and conditions for servicing an existing debt, usually on more favourable terms for the debtor. Debt rescheduling involves rearrangements on the same type of instrument, with the same principal value and the same creditor as with the old debt. Refinancing entails a different debt instrument, generally at a different value and may be with a creditor different than that from the old debt.

22.110 Under both arrangements, the debt instrument that is being rescheduled is considered to be extinguished and replaced by a new debt instrument with the new terms and conditions. If there is a difference in value between the extinguished debt instrument and the new debt instrument, part is a type of debt forgiveness by government and a capital transfer is necessary to account for the difference.

22.111 *Debt rescheduling* is a bilateral arrangement between the debtor and the creditor that constitutes a formal deferment of debt-service payments and the application of new and generally extended maturities. The new terms normally include one or more of the following elements: extending repayment periods, reductions in the contracted interest rate, adding or extending grace periods for the repayment of principal, fixing the exchange rate at favourable levels for foreign currency debt, and rescheduling the payment of arrears, if any.

22.112 The treatment for debt rescheduling is that the existing contract is extinguished and a new contract created. The applicable existing debt is recorded as being repaid and a new debt instrument (or instruments) of the same type and with the same creditor is created with the new terms and conditions.

22.113 The transaction is recorded at the time both parties record the change in terms in their books, and is valued at the value of the new debt.

Section B. Best Practices

3. Balance Sheet Net Debt

Greece 2015 YE Balance Sheet Net Debt, Correctly Calculated in Accordance with International Accounting or Statistics Rules is **45%** and **62%** of GDP, Respectively: Summary (€, Billions)

| 1. Rules: | International Accounting Standards (IPSAS/IFRS) | 2008 System of National Accounts (2008 SNA) | European System of Accounts 2010 (ESA 2010) | IMF Debt Sustainability Analysis (DSA) | Lisbon Treaty Excessive Deficit Procedure* (EDP) | |
|------------------------|---|---|---|--|--|-------|
| | | | | | FFV | PV |
| 2. Gross Debt | € 125 | € 155 | € 155 | € 203 | € 311 | € 155 |
| 3. Gross Debt % of GDP | 71% | 88% | 88% | 116% | 177% | 88% |
| 4. Net Debt | € 80 | € 110 | € 110 | € 187 | NA | NA |
| 5. Net Debt % of GDP | 45% | 62% | 62% | 106% | NA | NA |

Debt metrics for Greece EZ member state peers are not reduced under ESA 2010, 2008 SNA, or IMF DSA as there is no qualifying concessional or reorganized debt; and under IPSAS/IFRS, Portugal, Spain, and Ireland would report lower debt by approximately €23 billion, €18 billion, and €12 billion, respectively.

Notes: Japonica Partners collaborative analysis. *EC 479/2009 "Whereas (4)" states "The definition of 'debt' laid down in the Protocol on the excessive deficit procedure needs to be amplified by a reference to the classification codes of ESA 95". 2015 GDP of €176 billion from EC AMECO database and financial asset data from Eurostat (accessed 19 July 2016).

Debt Measurement by International Standards/Guidelines

“The truth only counts when there are agreed rules of evidence.” Financial Times, 9 October 2016.

| Standards / Guidelines | Securities | Loans | Rescheduled Debt | Financial Assets |
|------------------------|---|----------------|------------------|--|
| IPSAS | Amortized cost | Amortized cost | Amortized cost | All financial assets |
| IFRS | Amortized cost | Amortized cost | Amortized cost | All financial assets |
| 2008 SNA | Market value | Nominal value | Present value | All financial assets incl. receivables |
| ESA 2010 | Market value | Nominal value | Present value | All financial assets incl. receivables |
| IMF DSA | Concessional debt at 5% discount rate and other at nominal value; requires grant element of 35%+ to qualify | | | Financial assets corresponding to debt instruments |
| EDP (Dual) | Face value / PV | Face value | Face value / PV | None |

Note: Present value at time of transaction using market rates on commercial arms length basis.

Greece 2015 YE Balance Sheet Net Debt, Correctly Calculated in Accordance with International Accounting or Statistics Rules is **45%** and **62%** of GDP, Respectively: Details

(€, Billions)

| 1. Rules: 2. Authority and Benchmarks: | International Accounting Standards (IPSAS/IFRS) | 2008 System of National Accounts (2008 SNA) | European System of Accounts 2010 (ESA 2010) | IMF Debt Sustainability Analysis (DSA) | Lisbon Treaty Excessive Deficit Procedure* (EDP) |
|---|--|--|---|---|---|
| | Produced by independent and professional accounting standards boards. Utilised by leading governments globally including the UK, Switzerland, New Zealand, France, and Israel. Debt standards are IPSAS 29 and IFRS 39 and 9. Utilized by all major international publicly traded companies. | Produced and released under the auspices of the United Nations, the European Commission, the OECD, IMF, and the World Bank Group. All countries encouraged to report under 2008 SNA as soon as possible. 2008 SNA Sections 13.59 and 22.106-113. | ESA 2010 was promulgated to achieve the objectives set by the Treaty on the Functioning of the European Union (TFEU) and adopted in the form of a regulation of the European Parliament and of the Council dated 21 May 2013 to give a solid legal basis for Member States. ESA 2010 Sections 5.19-21, 7.67, 20.221 and 20.236. | Series of IMF Staff Guidance Notes and papers from 2007 to 2015. Topics include: public debt limits (effective date June 30, 2015), DSA-LIC frameworks and excel model, unification of discount rates, and Greece DSAs. | Debt definition is in Lisbon Treaty (2007) attached as Protocol 12 on Excessive Deficit Procedure* (EDP). Operative metric is the 60% debt to GDP for Member States. Of note, at year end 2015, the EU average D/GDP was 87% and the EZ average was 93%. EDP Notification Tables require present value of debt. |
| 3. Type of Debt Recalculated from (Future) Face Value: | All debt | Debt reorganizations and debt securities | Debt restructurings and debt securities | Concessional debt | Protocol 12: None; EDP Table 4, Item 4: Debt restructurings and debt securities |
| 4. Framework: | Reflect economic reality and provide most meaningful information for decision-making and accountability. | Statistical framework that provides macroeconomic accounts for policymaking, analysis, and research purposes. Of note, politically influenced rules and application provide numbers that reflect public policy preferences. | To achieve the objective of the Treaty on the Functioning of the EU (TFEU). To provide a set of harmonized and reliable statistics on which to base decisions and policy advice. Of note, politically influenced rules and application provide numbers that reflect public policy preferences. | The present value (PV) of debt is a more relevant indicator as it takes into account the concessionality of debt. For countries where official external financing on concessional terms is a key source of public external financing or has become a normality. | Legal compliance with the Treaty on the Functioning of European Union (TFEU) and Stability and Growth Pact with debt measured at face value. EDP Notification Table 4, Item 4 requires present value of debt. |
| 5. Debt Valuation Reference Points: | Market at initial recognition or substantial modification and then at amortized cost. | Debt reorganizations based on market (PV) at time of transaction, securities at market, and other debt at nominal value. | Debt reorganizations based on market (PV) at time of transaction, securities at market, and other debt at nominal value. | Concessional debt at 5% unification discount rate and other debt at nominal value. Requires grant element of at least 35% to qualify for PV. | Face value and present value. |
| 6. Consolidated Sectors | Controlled entities | Central, EBF, local, SSFs, and non-market SOEs | Central, EBF, local, SSFs, and non-market SOEs | Central, EBF, local, SSFs, and non-market SOEs; and as designated | Central, EBF, local, SSFs, and non-market SOEs |
| 7. Gross Debt | € 125 | € 155 | € 155 | € 203 | FV: € 311 / PV: € 155 |
| 8. Gross Debt % of GDP | 71% | 88% | 88% | 116% | FV: 177% / PV: 88% |
| 9. Financial Assets | Financial assets | Financial assets, including receivables | Financial assets, including receivables | Financial assets corresponding to debt instruments | NA |
| 10. Net Debt | € 80 | € 110 | € 110 | € 187 | NA |
| 11. Net Debt % of GDP | 45% | 62% | 62% | 106% | NA |

Notes: *Japonica Partners collaborative analysis. EC 479/2009 "Whereas (4)" states "The definition of 'debt' laid down in the Protocol on the excessive deficit procedure needs to be amplified by a reference to the classification codes of ESA 95". 2015 GDP of €176 billion from EC AMECO database and financial asset data from Eurostat (accessed 19 July 2016). Net Debt is Gross Debt less Financial Assets.

Progression of Maastricht Gross Debt to Balance Sheet Net Debt through Financial Engineering

(Euros, Billions)

| SN | Type of Debt/Asset | Maastricht Debt (Face Value) 31 Dec 2015 | IPSAS/IFRS International Accounting Adjustments (Includes Accretion) | | | | | Total Adjustments | Balance Sheet Net Debt 31 Dec 2015 | SN |
|-----|----------------------------------|--|--|---|---|---|--|-------------------|------------------------------------|-----|
| | | | OSI #1 Loans May 2010 | OSI #1 Loan Modification June 2011 | OSI #2/PSI #1 Extensive Restructuring Feb/Mar 2012 | OSI #3/PSI #2 Modification/Buyback December 2012 | OSI #4 Loans August 2015 | | | |
| 1. | Modified Securities | € 41 | € 0 | € 0 | € 24 | € 4 | € 0 | € 28 | € 13 | 1. |
| 2. | Modified/Concessionary Loans | € 221 | € 9 | € 5 | € 69 | € 57 | € 17 | € 157 | € 64 | 2. |
| 3. | Non-Revalued Debt | € 47 | € 0 | € 0 | € 0 | € 0 | € 0 | € 0 | € 47 | 3. |
| 4. | Adjustments | | € 9 | € 5 | € 93 | € 61 | € 17 | € 185 | | 4. |
| 5. | Total Gross Debt | € 312 | € 303 | € 298 | € 205 | € 144 | € 127 | | € 125 | 5. |
| 6. | GDP | € 176 | | | | | | | € 176 | 6. |
| 7. | Debt/GDP | 177% | | | | | | | 71% | 7. |
| 8. | Financial Assets Funded w/ Loans | | Concessionary Terms and Modifications: Highlights | | | | | | € 7 | 8. |
| 9. | Other Financial Assets | | EU Loans: 3M Euribor plus 300-400 bps. Maturities: 5 yrs. Grace period: 1.5 yrs. | EU Loans cut to 3M Euribor plus 200-300 bps. Maturities up to 10 yrs. Grace period up to 4.5 yrs. | EU Loans cut to 3M Euribor plus 150bps. Maturities up to 15 yrs. Grace period up to 10 yrs. | EU Loans cut to 3M Euribor plus 50bps. Maturities extended to 30 yrs. | | | € 38 | 9. |
| 10. | Total Financial Assets | | | | | | | | € 45 | 10. |
| 11. | Balance Sheet Net Debt | | | | | | | | € 80 | 11. |
| 12. | Balance Sheet Net Debt/GDP | | | | | | | | 45% | 12. |
| | | | | | EFSF Loans: Cost-of-funding plus 200-300bps. Maturities: 30 yrs. | EFSF Loans cut to cost-of-funding. Interest deferred for 10 yrs. Maturities extended to maximum 45 yrs. | | | | |
| | | | | | ANFA bonds issued on extant terms with interest and partial principal rebate. | | | | | |
| | | | | | SMP bonds issued on extant terms. | SMP interest and partial principal rebate. | | | | |
| | | | | | GGBs start at 2% coupon with maturities up to 30 yrs. | | | | | |
| | | | | | | | ESM Loans: ESM cost of funds (est. rate <1%). Maturities up to 44 years. Grace periods of 18+ years. | | | |
| | | | Most Comparable Debt Instrument | | | | | | | |
| | | | ~400 bps below market YTM. | Market prices/YTMs reflects CCC-rated GGB high yield status. | Market prices/YTMs reflects CCC-rated GGB high yield status. | Market prices/YTMs reflects CCC-rated GGB high yield status. | Market prices/YTMs reflects CCC-rated GGB high yield status. | | | |
| | | | € 71 | € 71 | € 275 | € 275 | € 296 | | | |

Maastricht Debt - Cumulative Face Value Adjusted

Notes: Simplification for presentation purposes. Estimate as of October 2016.

Greece Has Been Given a Significant Debt Competitive Advantage, with a **Debt Burden of About 50% of Investment Grade EZ Member State Peers**, but Earns Worse Ratings and Higher Borrowing Costs

(% of GDP, except as otherwise indicated)

| | October 2016 Credit Ratings <i>(M/S&P/F/D)</i> | 2015 Balance Sheet Net Debt | 2016 Annual Debt Service | 2016 Net Cash Interest | Next 5-Years Unfunded Debt Service | 3-Year Govt Bond Yields (YTM) |
|---------------------------------|--|-----------------------------------|--------------------------------|------------------------------|--|-------------------------------------|
| | | | | | | <i>Delta vs. Peer Avg.:</i> |
| Greece as % of Peers | | 57% | 50% | 60% | 27% | 6.92% |
| Greece | Caa3/ B- / CCC/CCCH | 45% | 6% | 2.0% | 16% | 7.16% |
| Ireland | A3/ A+ / A/AH | 53% | 9% | 2.3% | 46% | -0.39% |
| Spain | Baa2/BBB+/ BBB+/ AL | 69% | 13% | 2.8% | 58% | 0.08% |
| Italy | Baa2/BBB-/ BBB+/ AL | 113% | 15% | 4.0% | 74% | 0.36% |
| Portugal | Ba1/BB+/ BB+/ BBBL | 79% | 11% | 4.3% | 61% | 0.92% |

Notes: Japonica Partners collaborative analysis. Future Face Value of Debt (Maastricht) as a percentage of GDP: Greece 177%, Ireland 94%, Spain 99%, Italy 133%, Portugal 129% (EC AMECO data accessed 3 August 2016). Based on EC, Eurostat, IMF, Member State MOFs, and Bloomberg data. YTM as of 11 November 2016.

Confirmation of Incorrectly Calculated Greek Government Debt Numbers

- “**Greece’s New Agreement with Europe: This Time Different?**” **Intereconomics**. September/October 2015. Pelagidis, Theodore and Kazarian, Paul B.
- “**Greece’s Debt: Sustainable?**” **Harvard Business School Case Study**. June 2015. Serafeim, George
- “**The Curious Case of the Rules for Calculating Debt Relief**: A Technical Note on EU Accounting for Debt, Especially Restructured and Concessional Debt.” September 2015. **Ball, Ian**
- “**Greece Needs to Be Honest About the Numbers**.” Harvard Business Review. September 2016. **Jacobides, Michael, London Business School**
- “Greece’s government accounting, ‘**The Biggest Lie of the Century** – Kazarian.” **The Accountant**. October 2016.
- “What if Greece got massive **debt relief but no one admitted it? (Part 2 of 7 article series)**” **Financial Times**. 9 June 2016. **Klein, Matthew**

See also: www.MostImportantReform.info

Section B. Best Practices

4. Debt Service

Greece Debt Service is **50%** of EZ Peers versus a GFN (which Includes Non-Debt Flow Assumptions) of **123%**

GFN ignores highly concessional EZ 3rd Programme 2016 - 2018 funding support.

| | Debt Service % of GDP | IMF Gross Financing Needs (GFN) % of GDP |
|--------------------------|--------------------------|---|
| Greece | 6% | 19% |
| Portugal | 11% | 20% |
| Ireland | 9% | 9% |
| Spain | 13% | 17% |
| Italy | 15% | 17% |
| Peer Average | 12% | 15% |
| Greece % of Peer Average | 50% | 123% |

Notes: Debt Service is 2016 estimate based on Bloomberg, EC, and IMF data; includes interest expense and principal payments excluding T-Bills; Greece adjusted for deferred interest on EFSF co-financed loans, interest income on bank CoCos, and SMP/ANFA rebates. GFN includes assumptions such as cash buffer build-ups, payables reductions, fiscal balance, T-bills, and paydown of IMF loan balance, and ignores highly concessional EZ 3rd Programme funding support (estimated total remaining 2016-2018 funding of €31 billion).

Cash Interest: Greece vs. Peer 2016-2017

| | | 2016 | | | | | 2017 | | | | |
|----|--|----------------------|------------|--------------|------------|--------------|----------------------|------------|--------------|------------|--------------|
| | | <u>Cash Interest</u> | <u>GDP</u> | <u>% GDP</u> | <u>Rev</u> | <u>% Rev</u> | <u>Cash Interest</u> | <u>GDP</u> | <u>% GDP</u> | <u>Rev</u> | <u>% Rev</u> |
| 1. | Greece | 5.2 | 174.8 | 3.0% | 85.9 | 6.1% | 5.2 | 181.6 | 2.9% | 87.5 | 5.9% |
| 2. | Portugal | 8 | 184.4 | 4.3% | 80.7 | 9.9% | 8.3 | 190.6 | 4.4% | 83.5 | 9.9% |
| 3. | Spain | 31.3 | 1,118.0 | 2.8% | 424.4 | 7.4% | 30.4 | 1,163.2 | 2.6% | 437.5 | 6.9% |
| 4. | Italy | 66.4 | 1,669.8 | 4.0% | 790.8 | 8.4% | 64.3 | 1,710.6 | 3.8% | 797.9 | 8.1% |
| 5. | Ireland | 6.2 | 265.1 | 2.3% | 72.1 | 8.6% | 6.1 | 240.6 | 2.5% | 75.4 | 8.1% |
| 6. | Peer Average | | | 3.4% | | 8.6% | | | 3.3% | | 8.3% |
| 7. | Greece as % of Peer Average | | | 88% | | 71% | | | 86% | | 72% |
| 8. | Greece w/ Rebates | 3.5 | 174.8 | 2.0% | 85.9 | 4.1% | 3.8 | 181.6 | 2.1% | 87.5 | 4.3% |
| 9. | Greece w/ Rebates as % of Peer Average | | | | | 48% | | | | | 53% |

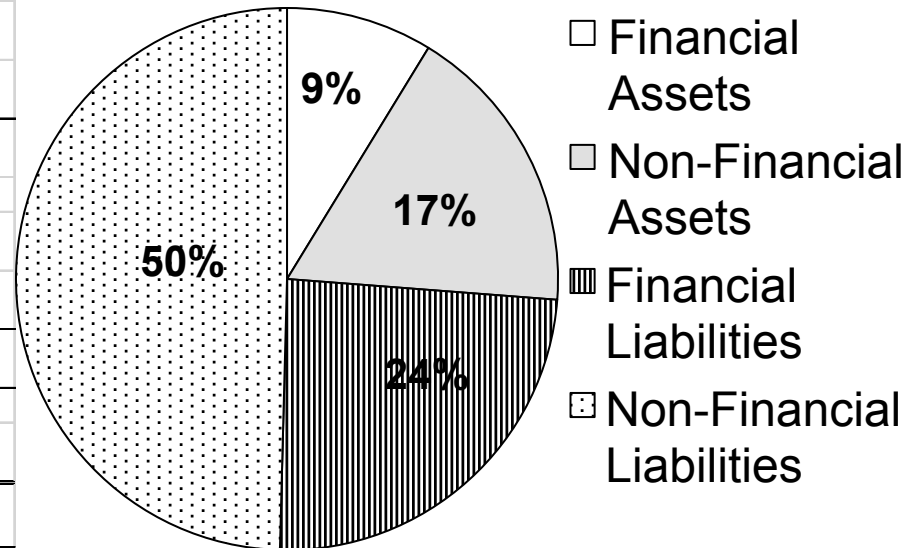
Notes: Greece cash interest estimated to include effects of interest deferrals, rebates, and payments on ESM loan investment in systemic bank CoCos. Other data from EC AMECO database (accessed 13 Nov 2016). Greece w/ Rebates assumes receipt of additional SMP/ANFA rebates as projected by IMF.

Section B. Best Practices

5. Consolidated Balance Sheet

Estimate: At Year-End 2015, the Greece Government had Over $\frac{1}{2}$ Trillion Euros in Assets and Liabilities to Manage or Mismanage, which is €47,400 per Citizen
(€, Billions; as of 31 December 2015)

| <u>SN</u> | <u>Balance Sheet Item</u> | <u>Amount</u> |
|-----------|------------------------------|---------------|
| 1. | Financial Assets | € 45 |
| 2. | Non-Financial Assets | € 90 |
| 3. | Total Assets | € 135 |
| 4. | Financial Liabilities | € 125 |
| 5. | Non-Financial Liabilities | € 255 |
| 6. | Total Liabilities | € 380 |
| 7. | Net Worth | -€ 245 |
| 8. | Total Assets and Liabilities | € 515 |



Notes: Japonica Partners collaborative analysis. Working draft balance sheet. For additional details, see Japonica Partners 30 April 2016 USC Global Leadership Summit presentation: mostimportantreform.info/MAGARIAN_USC_20160430.pdf.

Examples of Financial Decisions Benefiting from Understanding Financial Statement Impact

Assess transparency, performance, comparability (globally and historically), and accountability of the following (listed alphabetically by balance sheet section):

| | |
|-----|---|
| | Financial Assets: |
| 1. | Bank sector recapitalizations |
| 2. | Impairment on financial assets |
| 3. | Temporary designations hiding financial transactions |
| | Non-Financial Assets: |
| 4. | Asset sale vs. reinvestment decisions |
| 5. | Fixed asset deterioration |
| 6. | Leasing vs. buying |
| 7. | Public – private partnerships |
| 8. | Revenue and expense recognition on long-life agreements |
| 9. | Tax waivers |
| | Financial Liabilities: |
| 10. | Concessional loans |
| 11. | Debt buybacks |
| 12. | Emission premiums to understate debt |
| 13. | Exclusion of debt raised for specific purposes |
| | Non-Financial Liabilities: |
| 14. | Delaying government payments |
| 15. | Environmental liabilities bail-out |
| 16. | Government employee pension changes |
| 17. | Litigation exposure |
| 18. | Private pension bail-out |

Section B. Best Practices

6. Three Basic Decision-Making Tools

Three Basic Decision-Making Tools

1. Modified T-Accounts
2. Six Key Performance Indicators
3. Performance Gap

How do these Tools Improve Performance: Examples

- Allow decision makers to see the economic reality of **complex financial transactions and decisions**.
- Provide insights into **prospective liabilities**.
- Assist in **ranking financial impact** of various alternatives.
- Provide accurate information to **better manage financial and fixed assets**.

Tool 1: Modified T-Accounts

Start with 500 million plus euro decisions.

| Assets | | Total Debts / Net Worth | |
|------------------|--|---------------------------|--|
| | | | |
| Financial Assets | | Debt | |
| | | | |
| | | Total Debts | |
| | | | |
| | | Net Worth | |
| | | | |
| Total Assets | | Total Debts and Net Worth | |

Tool 2: Six Key Performance Indicators for Global Benchmarks Highlight Wide Performance Gap

(2001 to 2015)

Benchmarks include AUS, CAN, FRA, ISR, NZL, CHE, GBR, USA.

| | | <u>Rank #1</u> | <u>Rank #8</u> | <u>Median</u> | <u>Definition</u> |
|----|--|----------------|----------------|---------------|--|
| 1. | Value Creation Ratio (VCR) | NWI 70% of GDP | 0.3x | 2.0x | Change in GDP per unit change in Net Worth start point to end point. |
| 2. | Return on Assets (ROA) | 4% | -38% | -7% | Average annual change in net worth as a % of total assets. |
| 3. | Net Worth % of GDP - Latest | 38% | -158% | -66% | Latest period end net worth as a % of latest year GDP. |
| 4. | Net Worth Annual % Change | 19% | -13% | -4% | Average annual percentage change in net worth during period. |
| 5. | GDP Change to Debt Change Ratio | 651% | 53% | 147% | GDP increase per unit of debt increase start point to end point. |
| 6. | Net Debt % of GDP - Latest | 3% | 64% | 30% | As reported balance sheet net debt as a % of GDP. |

Notes: 2001 to 2015 data or all available data from this period.

Value Creation Ratio: Full period change in GDP divided by change in Net Worth.

Return on Assets (ROA): Change in net worth as a percentage of assets.

Net Worth as % of GDP - Latest: Latest period end (2014 or 2015) net worth divided by corresponding year GDP.

Net Worth Annual Percentage Change: Annual change in year end net worth.

GDP Change to Debt Change Ratio: GDP increase as a % of debt increase.

Net Debt % of GDP - Latest: Latest period end (2014 or 2015) net debt (debt less financial assets) derived from respective government balance sheets divided by corresponding year GDP.

VCR and ROA KPIs: Goals, Meaning, and Source of Improvement

Value Creation Ratio (VCR):

- **Definition:** change in GDP per unit change in Net Worth start point to end point.
- **Goal:** increase GDP and/or reduce cost of generating GDP.
- **Meaning:** value for money.
- **Sources of Improvement:** GDP growth and balance sheet management.

Return on Assets (ROA):

- **Definition:** annual or average annual change in net worth as a % of total assets.
- **Goal:** improve trends in net worth and/or improve the mix of revenue and expenses, and – importantly – changes in assets and liabilities.
- **Meaning:** performance of balance sheet management.
- **Sources of Improvement:** balance sheet management.

Financial Impact From Closing Government VCR and ROA Performance Gaps

- **Valuation Creation Ratio (VCR) Increase:** A VCR increase with same change in net worth corresponds to an increase in GDP, which if high value-add GDP, has precedent of yielding 25% to 50% in additional government revenue.
- **Return on Assets (ROA) Increase:** Increases in net worth reported in accordance with international accounting standards can confirm a combination of greater cash inflows on assets, increases in asset values, and reductions in current and future cash outflows.

Tool 3 - Performance Gap Framework: Greece Summary

(€, billions)

| | Value Creation KPI | | Return on Assets (ROA) KPI | |
|-----------------------------|--------------------|---------------------|----------------------------|-------------------------|
| | <u>Ratio</u> | <u>GDP Increase</u> | <u>Ratio</u> | <u>Net Worth Change</u> |
| Greece Current (Est.) | 0.3x | € 5 | -12% | -€ 17 |
| Benchmark KPI | 1.1x | € 18 | -7% | -€ 10 |
| Performance Gap | 0.8x | € 13 | 5% | € 7 |
| Performance Gap % of GDP | | 8% | | 4% |

Notes: see subsequent sheets for Greece calculations.

Tool 3 - Performance Gap Framework: Increase in GDP from Improving Value Creation Ratio (VCR)

Greece estimate based on benchmarks.

| <u>SN</u> | <u>Metric</u> | <u>Amount</u> | <u>% of GDP</u> |
|-----------|--|---------------|-----------------|
| 1. | Net Worth (2015) | -€ 238 | |
| 2. | Currently Estimated Annual % Change in Net Worth | -7% | |
| 3. | Expected Change in Net Worth ($SN1*SN2$) | € 17 | |
| 4. | Benchmark Value Creation Ratio | 1.1x | |
| 5. | Currently Estimated Value Creation Ratio | 0.3x | |
| 6. | VCR Performance Gap (Multiple) ($SN4-SN5$) | 0.8x | |
| 7. | VCR Performance Gap (€) ($SN3*SN6$) | € 13 | 8% |

Notes: Benchmarks include AUS, CAN, FRA, ISR, NZL, CHE, GBR, USA. Greece 2015 GDP of €176 billion (EC AMECO accessed 10 Apr 2016).

Tool 3 - Performance Gap Framework: Increase in Net Worth from Increasing Return on Assets (ROA)

Greece estimate based on benchmarks.

| <u>SN</u> | <u>Metric</u> | <u>Amount</u> | <u>% of GDP</u> |
|-----------|--|---------------|-----------------|
| 1. | Total Assets (2015) | € 142 | |
| 2. | Currently Expected Return on Assets | -12% | |
| 3. | Expected Change in Net Worth ($SN1*SN2$) | -€ 17 | -9% |
| 4. | Benchmark Return on Assets Ratio | -7% | |
| 5. | ROA Performance Gap (%) ($SN4-SN2$) | 5% | |
| 6. | ROA Performance Gap (€) ($SN1*SN5$) | € 7 | 4% |

Notes: Benchmarks include AUS, CAN, FRA, ISR, NZL, CHE, GBR, USA. Greece 2015 GDP of €176 billion (EC AMECO accessed 10 Apr 2016).

5-Year Cumulative Greece Government Performance Gap Impact on GDP and Revenues

| | % of Performance Gap | <u>VCR Performance Gap at 8% of Government</u> | | <u>ROA Performance Gap at 4% of Government</u> | |
|-----------|----------------------|--|-------------------------|--|-------------------------|
| | | <u>GDP Increase</u> | <u>Revenue Increase</u> | <u>GDP Increase</u> | <u>Revenue Increase</u> |
| 1. | 25% | € 18 | € 8 | € 9 | € 4 |
| 2. | 50% | € 35 | € 16 | € 18 | € 8 |
| 3. | 100% | € 70 | € 32 | € 35 | € 16 |

Notes: Assumes 5 years, starting GDP of €176 billion, VCR Performance GAP of 8%, ROA Performance Gap of 4%, and Government Revenue Increase % of GDP Increase of 45%.

Best - Worst Practices Performance Gap: Illustrative Balance Sheet Line Items (1 of 2)

| | Best Practice | Worst Practice |
|-----|---|--|
| | Financial Assets: | Financial Assets: |
| 1. | Internal cost of capital allocation. | Ignore existence of working capital and its cost. |
| 2. | Benchmarking to achieve top quartile performance. | Bottom quartile performance or no benchmarking or management of financial assets. |
| 3. | Better returns and minimized risk exposure on politically influenced loans. | Opacity and large losses on politically influenced loans. |
| 4. | Full disclosure of financial assistance to and returns on SOEs. | Hidden SOE economic burden and risk. |
| | Non-Financial Assets: | Non-Financial Assets: |
| 5. | Optimal re-investment in and use of real estate assets. | Chronic mismanagement of potentially high value commercial real estate assets. |
| 6. | Charge units market cost of real estate to improve utilization. | Cost of real estate of units limited to maintenance cost and no impairment charges. |
| 7. | Better management of and reinvest in potential asset sales to increase value and Taxpayer's Net Worth. | Fire sales of public assets to gain current cash. |
| 8. | Low and declining single digit percentage fraud in accounts receivable. | Double digit percentage fraud in accounts receivable payments. |
| 9. | Projects built based on lowest cost to financial metrics. | Public private partnerships with private party has required double digit rate of return, including sale-and-leasebacks. |
| 10. | Concessions that both maximize long term value creation and improve value for the money in delivery of services. | Front-end load inflows to fund exiting (or even worse, new promises) annually recurring operating expenditures. |
| 11. | Asset depreciable lives that encourage high ROI program maintenance. | Unrealistically long depreciation lives that short change program maintenance and create larger replacement costs in the future. |
| 12. | Measure and report real estate tax basis appreciation in areas surrounding government infrastructure investments. | Ignore reporting and accountability for impact of infrastructure investments. |
| 13. | Annual impairment reviews of tangible and intangible assets create discipline to protect asset value. | No balance sheet and/or no proper annual review hides asset value destruction. |
| 14. | Measure, manage, and disclose both billed and collected taxes, including on the balance sheet. | Focus on and report only taxes collected not billed, with no balance sheet. |

Best - Worst Practices Performance Gap: Illustrative Balance Sheet Line Items (2 of 2)

| | Best Practice | Worst Practice |
|-----|---|---|
| | Financial Liabilities: | Financial Liabilities: |
| 15. | International standards and audits. | Incorrectly calculating balance sheet debt. |
| 16. | Report pro-forma impact on financial statements. | Ignoring quantification of debt relief impact on net worth. |
| 17. | Use all three tools to understand economic impact of liability management exercises. | Liability management without consideration of financial statement impact. |
| | Non-Financial Liabilities: | Non-Financial Liabilities: |
| 18. | Payables paid on exact date due. | Incur and not report interest penalties on arrears. |
| 19. | Disclose impact on financial statements of change in government employee pension terms. | Non-quantification of balance sheet impact of change in government employee pension terms. |
| 21. | Quantifies and proactively manages litigation risk. | Ad hoc post-event handling. |
| 22. | Fully funded civil service pension funds. | Assuming non-government pension liabilities in exchange for cash, and showing cash inflow as revenue while not reporting the corresponding liability. |

Section C.
Worst Practices for
Governments Winning
Trust & Confidence
(Εμπιστοσύνη & Αξιοπιστία)

Section C. Worst Practices

1. Political Spin Overrides Accurate Facts
2. Opaque and Biased Modeling Assumptions
3. Deny Existence of Debt Relief and Corresponding Reduction in Balance Sheet Net Debt
4. Gross Financing Needs
5. Multi-Decade Projections of Government Debt are Highly Prone to Political and Lender Bias
6. Financial Asset Mismanagement and Non-Disclosure
7. Don't Use or Misuse Peer Comparisons
8. Preventing Best Practice Implementation

Section C. Worst Practices

1. Political Spin Overrides Accurate Facts

Comparison of International Accounting and Political Definition of Greek Debt Relief and Debt Reduction

Background facts: Greece rated CCC and 25-year bonds YTM approximately 8%. ESM 30-year bond YTM less than 1%.

| Debt Operations | Properly Reported as Reduction in Net Debt | Politically Called Debt Relief | Politically Called Debt Reduction |
|---|---|---------------------------------------|--|
| 1. €60 billion of 30+ year below 1% loans mostly to refinance existing debt. | Yes | No | No |
| 2. Rebates of interest and principal. | Yes | No | No |
| 3. Concessional loans to purchase financial assets. | Yes | No | No |
| 4. Restructured loans with lower interest, grace period, maturity extensions. | Yes | Yes | No |
| 5. Change terms on bonds to reduce interest rates and extend maturities. | Yes | Yes | No |
| 6. Haircut the face value of debt. | Yes | Yes | Yes |
| 7. Paying more interest by using swaps to change interest rate profile. | No | Yes | No |

Examples of **Public Statements** on Greece Government Debt Based on Politics, **not Facts**

1. **Governor of the Bank of Greece Yannis Stournaras** comments illustrate that vested interests override facts and transparency: **“Everybody realizes the importance of the IMF** staying in the program and the IMF realizes it too. The IMF is close to our proposal at the Bank of Greece on **debt measures** and relaxing fiscal targets somewhat after the expiry of the current program.” (Reuters, 10 Nov 2016)
2. **IMF Managing Director Christine Lagarde** comments indicative of lender bias: “Our conditions have not changed. We believe that there have to be very significant structural reforms in place and delivered. We also believe that there has to be debt that is sustainable going forward. We have demonstrated flexibility in the past in order to assess debt sustainability. We clearly believe that, as is, the **debt is not sustainable.**” (Press conference, 6 Oct 2016)
3. **Deputy Minister of Finance Giorgos Chouliarakis** recent speech includes relentlessly repetitive references to the Greek debt being unsustainable, stating: “It is clear that, under present circumstances, **Greek debt is unsustainable... There is no doubt** that the public debt's haircut is a crucial link on the way to the state's exit from the crisis. There is no doubt for this.” (Speech to Parliamentary Subcommittee, 3 Nov 2016)
4. **The Truth Committee on Public Debt** stated that **Greek government “debt is odious, illegal and illegitimate and wholly unsustainable**...the Third MoU is based on the same hypotheses and postulates as the two previous MoU. Therefore, it is destined to fail, leaving the debt unsustainable.” (August 2015 Report)

Present Value Acknowledged but Not Properly Reflected on the Balance Sheet: EU-Related Comments

- 1. Germany Deputy Minister of Finance Jens Spahn:** Debt burden should be assessed based on "net **present value** of debt" and "how much in fact does Greece have to pay per year". (Bloomberg, 2 Sep 2015)
- 2. European Stability Mechanism Managing Director Klaus Regling:** Greece debt ratio is meaningless (WSJ, 26 Sep 2013) given very generous concessional terms on the debt, and the debt relief should be measured using net **present value** (ESM Annual Report, 18 Jun 2015)
- 3. Germany Chancellor Angela Merkel:** "It is rightful **that we do not ask about the 120% debt [to GDP] ratio**, but ask, what is the actual burden on Greece from its debt service." (Axia, 1 Sep 2015)
- 4. IMF:** Given the extraordinarily concessional terms that now apply to the bulk of Greece's debt, the debt/GDP ratio is not a very meaningful proxy (Greece Preliminary DSA 26 Jun 2015). **Present value** of debt is the appropriate measure for non-market access countries (DSA LIC Framework, 5 Nov 2013)
- 5. CDU Economic Council:** It is the **present value** of a loan that is decisive, not the nominal value. Greece debt is significantly lower than thought. This 'competitive edge' is kept quiet. (Letter to Members of the CDU/CSU Parliamentary Group, 24 Feb 2015)
- 6. Former Member of German Council of Economic Experts Beatrice Weder di Mauro:** The **present value** of outstanding Greek debt is now about 100% of GDP. (Brookings, Sept 2015)

Present Value Acknowledged but Not Properly Reflected on the Balance Sheet: Within Greece Comments (1 of 4)

1. **New Democracy President Kyriakos Mitsotakis:** The public debt is not the most fundamental problem of the Greek economy. The problem is the reform deficit, competitiveness deficit, investment deficit, and the persistent unemployment. In other words, the denominator is the problem. The GDP, far more than the numerator, the debt. A very interesting debate has begun on the accurate representation of the public debt in **present value** terms. (Speech in Parliament, 22 May 2016)
2. **Former Deputy Prime Minister and Finance Minister Evangelos Venizelos:** Since the beginning of 2012, Greece has received a debt reduction of more than €200 billion: €100 billion in nominal terms, and another €100 billion in net **present value** terms. (Speech to Hellenic Republic Parliament, 4 Dec 2015)
3. **Former Finance Minister Gikas Hardouvelis:** Greece was offered substantial debt relief through the PSI of February 2012 as well as maturity extensions, interest rate reductions and even a grace period in its interest rate obligations... The long maturities, low yields and grace period render the true **(present) value** of debt obligations very small relative to its nominal (face) value. (World Post, 29 Feb 2016)
4. **Former Finance Minister Yannis Varoufakis:** A Misunderstanding - The misunderstanding regarding Greece solvency owes to the fact that the blunt 175% Debt-to-GDP number does not fully describe the actual burden to public debt over the economy. Indeed, if Greece's debt was calculated in **NPV** terms, say with a 5% discount rate factor, the Debt-to-GDP ratio would already be as low as 133% of GDP. (Eurogroup Non-Paper, 16 Feb 2015)

Present Value Acknowledged but Not Properly Reflected on the Balance Sheet: Within Greece Comments (2 of 4)

5. **Former Minister of Economy and Finance Nikos Christodoulakis:** I agree that the **present value** of the debt is the right way to look at the debt stock. Debt is not the issue, it's about growth. (CEPS, 9 Feb 2016)
6. **Bank of Greece Deputy Governor and Former Deputy Finance Minister Iannis (John) Mourmouras:** Greek debt should be correctly calculated using international accounting standards, based on **present value** terms, which would most accurately reflect the economic reality that most of Greek government debt is with the official sector and under concessional terms (low interest rates and long maturities).
7. **Deputy Minister of Foreign Affairs and Former Deputy Finance Minister Dimitris Mardas:** Greece government debt would be recorded at net **present value** taking into consideration the current value of the debt discounted by their expiry date on the basis of the market. (Economist Government Roundtable Speech, 14 May 2015)
8. **Governor of the Bank of Greece Yannis Stournaras:** The combination of these actions would amount to a net **present value** benefit of about 17% of 2015 GDP for Greece over the next 35 years, thus improving debt sustainability. (LSE Speech, 25 Mar 2015)
9. **Deputy Minister of Finance Giorgos Chouliarakis:** The main short-term measure is considered to be the restructuring under conditions of **present value** of the large debt of EFSF. (Speech to Parliamentary Subcommittee 3 November 2016)

Present Value Acknowledged but Not Properly Reflected on the Balance Sheet: Within Greece Comments (3 of 4)

10. **PWC Greece:** The net **present value** of Greece government debt is less than half of its nominal value. (Directions for Economic Recovery in Greece, Sep 2013)
11. **Brookings Institute Senior Fellow Theodore Pelagidis:** Undermining business confidence for political reasons by saying that debt is unsustainable? A vicious circle of political risk and debt sustainability. Greece debt metrics are a fraction of peers, but its borrowing costs are almost 1,000 bps greater. Why? The political risk again is the answer. Numbers are even better when using **present value**, not future face value. (LSE, 1 Mar 2016)
12. **LBS Professor Michael Jacobides:** Calculating this debt in **“present” (i.e., today’s) value**, as the leading governments and businesses that follow international accounting standards do, suggest that the debt is actually 68% of GDP rather than 176%, the number you get if you considered the debt without taking into account maturities and duration. And that is without even deducting the significant value of government financial holdings to produce the net debt figure. (Harvard Business Review, 16 Sep 2016).
13. **American-Hellenic Chamber of Commerce Executive Director Elias Spirtounias:** When accounted for correctly, Greece’s **net debt to GDP** is significantly below 60%, not the often cited figure of 175%. (Nov 2014)

Present Value Acknowledged but Not Properly Reflected on the Balance Sheet: Within Greece Comments (4 of 4)

14. **Chair of Transparency International Greece Costas Bakouris:** Using IPSAS, we could highlight that the **fair value** of our loan obligations is much lower than the nominal one... comparison of the fair value versus the nominal value of the net versus the gross debt to GDP will be considerably less and it is estimated to be comparatively less than that of our creditors, which actually constitutes an important competitive advantage. (Naftemporiki, 19 Feb 2015)
15. **Chairman of AmCham Taxation Committee Stavros Costas:** In the framework of the implementation of IPSAS, the value of the Net Debt on 31 December 2013 would be 18% of GDP, a substantially lower level than the subversive threshold of 60% GDP provided for by Maastricht Treaty... By the principal criterion of Net **Present Value**, instead of the Market Value, the classification of the Country, according to the Maastricht Treaty, at the 12th and final unfavorable position among the 12 Eurozone Countries with an increased Debt, would change drastically by bringing competitively the Country to the second best position, after Slovenia. (Voria, 23 Dec 2014)
16. **Kathimerini Editorial (INYT local affiliate):** Editorial calls the government claims of a debt mountain a hoax on the public and the refusal to admit that debt relief reduced the debt outstanding part of a failed and destructive political strategy. (Kathimerini, 4 July 2016)

Greece Ministry of Finance Non-Paper to European Working Group (Circa Feb 2015) Indicating Debt as a “Misunderstanding”

Where is the net debt?

Annex 2: Debt Sustainability

Debt sustainability is about keeping the debt-to-GDP ratio under control. This typically requires that the deficit is low enough to guarantee that the debt ratio is falling rather than rising. To compute this threshold one needs to make assumptions on growth. An economy with zero (nominal) growth needs a balanced budget. With positive growth, some deficit is consistent with solvency; all it takes is for the debt to grow less rapidly than GDP.

In the case of Greece, with a debt-to-GDP ratio at 175%, the deficit that would stabilize the debt to GDP ratio at its current level is 7% of GDP ($=4\% \times 1.75$) assuming a conservative growth of 4% in nominal term. Greece has already better performed since in 2014, the deficit fell under the Maastricht benchmark of 3%. In structural terms, correcting the measure of the deficit for the output gap, Greece is actually engineering a fiscal surplus of 1.6% of GDP (according to IMF).

In other words, a 3% deficit is well within the boundaries of sustainability as conventionally defined. Given the interest bill, of about 3% of GDP today and potentially of 4.5% in the future (once the interest deferral on EFSF loans expires), a primary surplus of 1.5% is up to the task.

The attached simulation shows the downward debt trajectory until 2054 assuming a constant 1.5% of GDP primary surplus.

Discussion with the IMF over such DSA-style discussions would be critical. The 4.5% primary target is only required to bring debt below an arbitrary threshold of 124% by 2020 (according to the latest DSA) and below 120% in 2022. However, the IMF does not take into account the adverse consequences on growth of the austerity shock that is required to meet this fiscal target. Yet, GDP growth is as important, and even more important, than the primary surplus to reduce the debt to GDP ratio. Besides, any attempt to further squeeze the budget in the current context of humanitarian crisis and slight resurgence of economic growth would have a disastrous impact on both the economic and social fronts.

A Misunderstanding

The misunderstanding regarding Greece solvency owes to the fact that the blunt 175% Debt-to-GDP number does not fully describe the actual burden of public debt over the Greek economy.

Greece currently owes the EFSF c. €142bn (75% of 2015 IMF projected GDP), bearing an interest rate of c. 2.5%, and having a final maturity of 39yrs (amortizing from year 2023 until year 2054). This high level of concessionality of the EFSF loans is not captured in the nominal debt/GDP ratio used by the IMF in the case of Greece. The same analysis can be made for GLF loans (interest rate at 50bp above Euribor, i.e. currently 0.65%, and final maturity 2041).

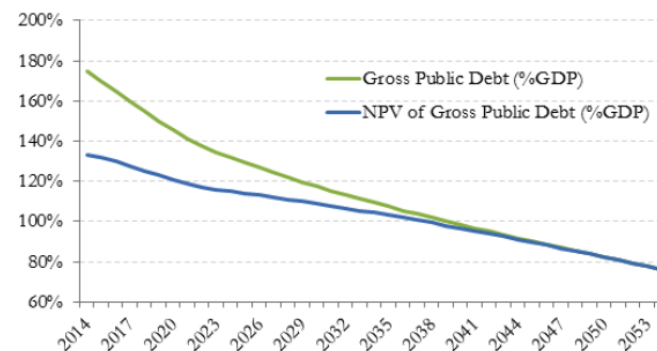
In an interview in September 2013, head of ESM Klaus Regling strikingly stated that DSA analyses undertaken by the IMF are “meaningless”. A key argument from Regling is that the debt parameters are as important to assess debt sustainability as the debt nominal level itself: EFSF loans are very long term, with

very concessional interest rate reduced to EFSF funding cost of approximately 2% plus an operational margin cost of c. 50bp.

Indeed, if Greece's debt was calculated in NPV terms, say with a 5% discount factor, the Debt-to-GDP ratio would already be as low as 133% of GDP (see below), and reach 127% in 2020 (as expected by the IMF in nominal term) with a primary surplus maintained at 1.5% of GDP instead of 4.5%.

We show below the debt-to-GDP ratio dynamics under the assumption of a primary surplus maintained at 1.5% and conservative assumptions of nominal growth at 4% (below IMF expectations).

Under this set of assumptions, the NPV of Public debt reaches 120% of GDP in 2020.



We show below the same dynamics under the assumption of a long term primary surplus of 4% as requested by the EU. Under these unjustified assumptions, the debt would dramatically decrease and totally disappear within the next 30 yrs, which is not the definition of sustainability.

Section C. Worst Practices

2. Opaque and Biased Modeling Assumptions

IMF GFSM **Recommends Use of IPSAS (IFRS)** Financial Statements

IPSAS *[Public Sector Version of IFRS]:*

- General purpose financial statements are used to evaluate financial performance and **financial position**, hold management accountable, and inform decision making by users of the general purpose financial statements. (GFSM Box A6.1 p.343)
- “**IPSASs** are international standards and recognized as **best practice** for public sector financial reporting.” (GFSM p.341)

Government Finance Statistics:

- The GFS reporting framework was developed specifically for public sector input to other macroeconomic datasets. (GFSM Box A6.1 p.343)

IMF Recommends Present Value of Debt for Measuring Concessional Financing

IMF Staff Guidance Note prepared by the IMF and the World Bank (April 2007):

1. Countries that primarily rely on concessional financing, the net present value **(NPV) of debt is needed to be informative** as a measure of a country's effective debt burden. (p.25)
2. This [debt] burden is **best measured** using the **net present value (NPV) of debt** to **capture the concessional**ity of outstanding debt. (p.7)
3. **NPV debt ratios** are summary indicators of the burden represented by the future obligations of a country and thus **reflect long-term risks to solvency**. (p.7-8)

DSA LIC Framework (5 Nov 2013):

Debt stock indicators in the DSF are in present value rather than nominal terms. (p.12)

IMF Factsheet (7 Apr 2016):

Discusses use of present value of debt. (p.1)

IMF **Recommends Net Debt**, in Addition to Gross Debt, as an Important Metric

IMF Staff Guidance Note (May 2013):

1. Staff should consider three important issues including **gross versus net debt**. (p.8)
2. Complementary analysis based on **net debt** presented to show the impact of **risk-mitigating factors**. (p.8)
3. The use of a **standard statistical definition** of **net debt** in line with the Public Sector Debt Statistics Guide is recommended. (p.9)

Section C. Worst Practices

3. Deny Existence of Debt Relief and
Corresponding Reduction in Balance
Sheet Net Debt

Key Stakeholder Statements on Greek Government Debt and Debt Relief

- **The Greek PM:** Debt relief by year-end is an “**indispensable condition**” to returning to the markets. (Sept. 2016)
- **The Greek FM:** If Greece’s EU partners **kick the can two years down the road** on debt relief, then investors will remain far away, it will be bad for the government and the country, and there should be a discussion about Greece’s place in Europe. (Oct. 2016)
- **2017 Budget:** Talks on the **restructuring of public debt will play a decisive role** on the developments of 2017 as they are a crucial step in restoring investor confidence, the (country’s) long-term credit rating and the credibility of the economy. (Oct. 2016)
- **IMF:** Greek government debt **remains unsustainable and requires substantial debt relief**. (Sept. 2016)
- **Rating Agencies:** S&P: Greece has the **highest** debt/GDP ratio of all sovereigns we rate. (July 2016). Fitch: Greece has the **second highest** debt/GDP ratio of all the countries we rate. (Sept. 2016)
- **International Commentators:** For example, Former Citi Vice Chairman: Greece government debt is the **barrier to confidence and debt relief is essential**. (Sept. 2016)

Actual Text from May 2016 EU-Greece Agreement on **Short-Term Measures** has No Debt Relief

- Eurogroup Statement: “For the short-term, the Eurogroup agrees on a first set of measures which will be implemented after the closure of the first review up to the end of the programme and which includes:
 - ✓ Smoothing the EFSF repayment profile **under the current weighted average maturity;**
 - ✓ Use EFSF/ESM **diversified funding strategy** to reduce interest rate risk without incurring any additional costs for former programme countries;
 - ✓ **Waiver of the step-up** interest rate margin related to the debt buy-back tranche of the 2nd Greek programme for the year 2017.”
- Dijsselbloem Statement: “**The short term is basically a debt management...** The possible debt relief -- mainly talking about the medium term package-- will be delivered at the end of the programme, so we are talking mid-2018.”
- Regling Statement: “Under the short-term measures, the ESM in our own responsibility will do debt management exercises.” As these measures include lengthening maturities, **“in the short run, interest costs may go up.”**

Klaus Regling (ESM/EFSF) on Reducing Greece Interest Rate Risk

- “It’s important as a reminder that some of these measures mean **there could be additional costs upfront** before one can have benefits later on. For example, if one has an interest rate swap – swapping shorter-term rates for longer-term rates. The **costs go up in the short run**, but there are savings in the longer term.” *Eurogroup press conference, 7 November 2016.*
- “But one also has to understand that does not necessarily, and certainly not in the short run, lead to savings for Greece. Actually, **if we extend our maturities, in the short run, interest costs may go up**. But then we would lock it in, so that’s a benefit in itself, that the risk of interest rate change is reduced. And then, in the longer run, there should be savings if the expectation that interest rates go up globally in the longer run materialises.” *Eurogroup Press Conference, 25 May 2016.*

In 2015, **Greece Net Worth Increased €17 Billion** from Third Programme Debt Relief on €21.4 Billion of Loans

During 2015, ESM made five concessionary loans to the CCC-rated Greece government for a total of €21.4 billion. The loans have an interest rate equal to AAA/Aa1-rated ESM cost of funds, which is less than 1%, not the yield-to-maturity of 7% to 8% on the longest maturity publicly traded Greece government bond. The loans have maturities out to 2059, 18-year grace periods, and weighted average lives of 32.5 years. Approximately, €16 billion of the proceeds were used to repay maturing debt and €5.4 billion to purchase financial assets of domestic banks, most of which was invested in 8% interest CoCos.

| Before Third Programme | | | | Post-Third Programme | | | |
|------------------------|-------|---------------------------------|---------|----------------------|-------|---------------------------------|-------|
| Assets | | Liabilities / Net Worth | | Assets | | Liabilities / Net Worth | |
| Financial Assets | € 0.0 | Debt | € 16.0 | Financial Assets | € 5.4 | Debt | € 4.4 |
| | | Total Liabilities | € 16.0 | | | Total Liabilities | € 4.4 |
| | | Net Worth | -€ 16.0 | | | Net Worth | € 1.0 |
| Total Assets | € 0.0 | Total Liabilities and Net Worth | € 0.0 | Total Assets | € 5.4 | Total Liabilities and Net Worth | € 5.4 |

Note: As of 31 December 2015. The €21.4 billion of ESM loans are reported on the balance sheet at initial recognition value (also known informally as present value) which is amortized cost under international accounting rules and increase (accrete) to maturity value (known informally as future face value) each accounting period. The subsequent accretion impact to net worth is reduced by appreciation in the financial assets and debt relief from inflows of ESM funds.

Greece-ESM 3rd Programme **Debt Relief, Debt Reduction, and Interest Savings: 2015 and 2016**

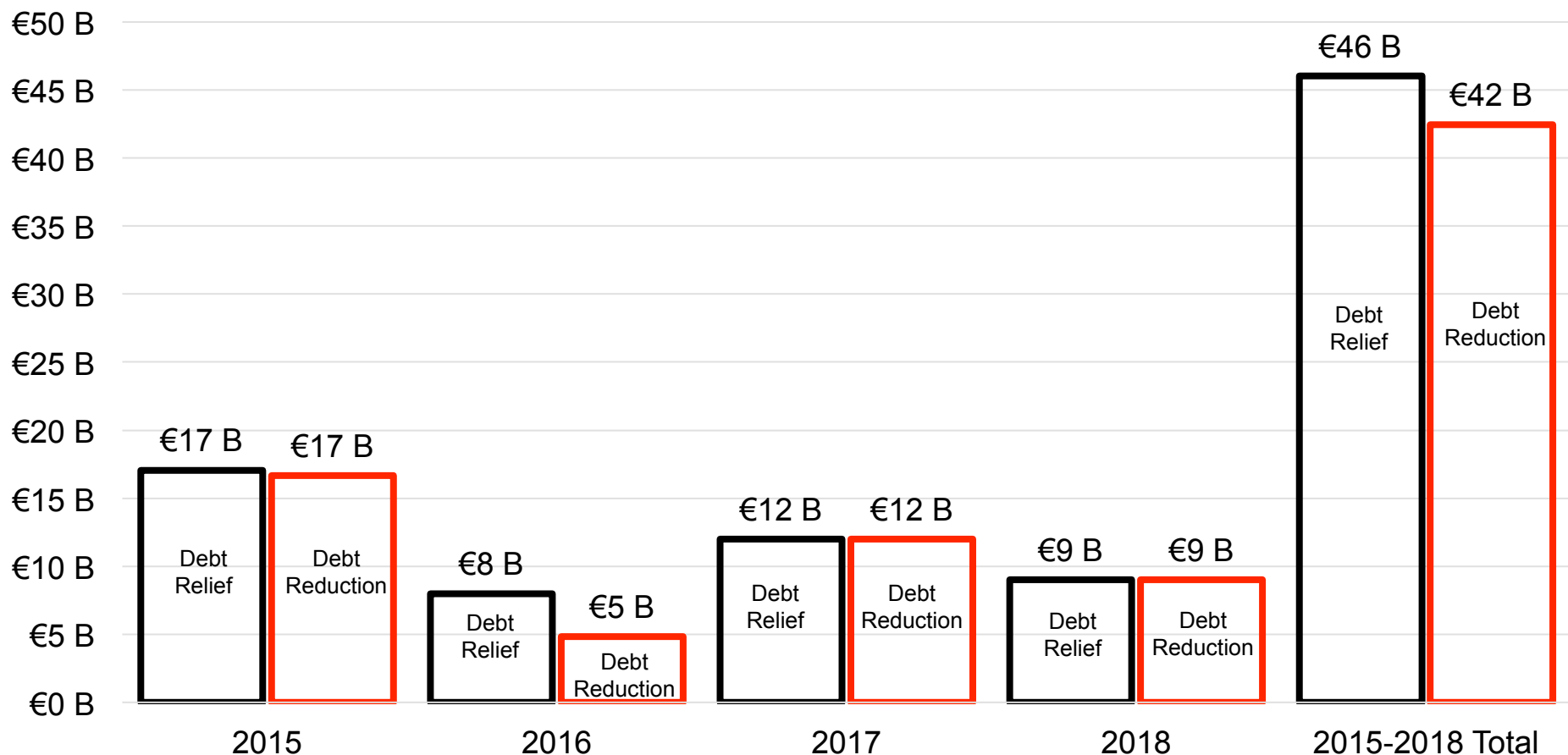
(€, Millions)

- ESM 3rd Programme concessional loans have interest rate of approximately 1%, grace periods of 18 years, and final maturities of 43 years.
- Greece long-term bonds yield approximately 8% and have average credit rating of CCC.
- International rules utilized are the world-class International Public Sector Accounting Standards (IPSAS) and the International Financial Reporting Standards (IFRS).

| SN | Distribution Date | Loan Disbursed | Debt Relief | Balance Sheet Debt | Net Debt Reduction | Annualized Interest Saving |
|--------------------------------------|-------------------|----------------|-------------|--------------------|--------------------|----------------------------|
| 1. | 20 Aug 2015 | € 13,000 | € 10,486 | € 2,514 | € 10,086 | € 910 |
| 2. | 24 Nov 2015 | € 2,000 | € 1,536 | € 464 | € 1,536 | € 140 |
| 3. | 1 Dec 2015 | € 2,720 | € 2,112 | € 608 | € 2,112 | € 190 |
| 4. | 8 Dec 2015 | € 2,710 | € 2,142 | € 568 | € 2,142 | € 190 |
| 5. | 23 Dec 2015 | € 1,000 | € 780 | € 220 | € 780 | € 70 |
| 6. | 21 Jun 2016 | € 7,500 | € 5,687 | € 1,813 | € 3,887 | € 525 |
| 7. | 21 Oct 2016 | € 1,100 | € 853 | € 247 | € 853 | € 77 |
| 8. | 21 Oct 2016 | € 1,700 | € 1,318 | € 382 | € 0 | € 119 |
| 9. | Total | € 31,730 | € 24,914 | € 6,816 | € 21,395 | € 2,221 |
| <i>Inputs:</i> | | | | | | |
| ESM Interest Rate: | | 1% | | | | |
| Market Interest Rate | | 8% | | | | |
| Present Value of Est. Disbursements: | | 20% | | | | |

Notes: Prepared under the direction of Japonica Partners based on ESM and Bloomberg data as of 14 October 2016. Use of proceeds: SN1./SN2./SN5.: €400 million for arrears; SN3./SN4. bank recap; SN6. €1.8 billion for arrears; SN7. debt service; SN8. arrears.

Who Will be Held Accountable for Not Recognizing the **€46 Billion** of Debt Relief and the **€42 Billion** of Debt Reduction from the 3rd Programme Concessionary Loans?



Notes: Prepared under the direction of Japonica Partners based on ESM and Bloomberg data as of 14 October 2016. 2017 estimate assumes present value of 22% of €15.7 billion disbursement; 2018 estimate assumes present value of 27% of €12.9 billion disbursement. 2017-2018 debt reduction estimates may require adjustment upon further disclosure of use of proceeds.

Since 2010, Greece Has Received **€356 Billion** in Debt Relief, which is **17 Times More** than the EZ Programme Country Average

(€, Billions)

| <u>SN</u> | | Greece | Greece Multiple of Peers | Peer Average | Portugal | Ireland | Spain | Cyprus |
|-----------|---|--------------|--------------------------|--------------|----------|---------|---------|--------|
| 1. | Total Debt Relief/Forgiveness % of GDP | 203% | 17x | 12% | 16% | 7% | 2% | 24% |
| 2. | Months in Programme(s) | 77+ | | 28 | 37 | 36 | 18 | 22 |
| | Official Sector Debt Relief: | | | | | | | |
| 3. | Pre-Third Programme | € 182 | | € 17 | € 29 | € 14 | € 21 | € 4 |
| 4. | Third Programme (to Date) | € 25 | | NA | NA | NA | NA | NA |
| 5. | Total Official Sector Debt Relief | € 207 | | € 17 | € 29 | € 14 | € 21 | € 4 |
| 6. | Private Sector Debt Forgiveness | € 149 | | € 0 | € 0 | € 0 | € 0 | € 0 |
| 7. | Total Debt Relief and Forgiveness | € 356 | | € 17 | € 29 | € 14 | € 21 | € 4 |
| 8. | Southern Axis EU Member States Contribution to Greece | € 91 | | | | | | |
| 9. | 2015 GDP | € 176 | | € 373 | € 179 | € 215 | € 1,081 | € 17 |

Notes: Japonica Partners collaborative analysis. Based on EC, IMF, and Bloomberg data. Debt relief calculated as of 31 October 2016 according to IPSAS/IFRS.

Greece Floating Rate Debt is Only 17% of Total Debt, Not the 69% Reported

(€, Billions)

ESM and EFSF loans are clearly not floating by any international accounting standards definition, as they relate to each entity's entire capital structure, unlike the GLF loans that float based on 3-month Euribor plus 50 bps. ESM weighted average life of debt capital structure is approximately seven years, which is similar to many sovereigns.

| | PDMA Public Debt Bulletin No. 81 March 2016 | | Estimate Based on Publicly Available Data | |
|---------------|---|------------------|---|-------------------|
| | | | <u>Amount</u> | <u>% of Total</u> |
| Fixed Rate | 31% | Fixed: | | |
| Floating Rate | 69% | ESM | € 21.4 | |
| Total | 100% | EFSF | € 130.9 | |
| | | PSI GGBs | € 25.6 | |
| | | ANFA/SMP GGBs | € 20.5 | |
| | | T-bills | € 14.8 | |
| | | 2014 GGBs | € 6.1 | |
| | | IMF | € 14.5 | |
| | | Other | € 23.1 | |
| | | Subtotal | € 256.9 | 83% |
| | | Floating: | | |
| | | GLF | € 52.9 | 17% |
| | | Total | € 309.8 | 100% |

Notes: Hellenic Republic Public Debt Management Agency (PDMA) data from Public Debt Bulletin, which notes “Fixed/ floating participation is calculated including Interest Rate Swap transactions.” Estimate Based on Publicly Available Data from Japonica Partners collaborative analysis.

Section C. Worst Practices

4. Gross Financing Needs Misunderstood and Misused

GFN (Gross Financing Needs)

Undermines Trust & Confidence

1. GFN moves in the opposite direction of improving transparency.
2. GFN is not based on independently developed international standards.
3. GFN is widely confused to be debt service, which it is not.
4. GFN is subject to unilateral assumptions that are not consistently applied and prevent comparability.
5. GFN is not an auditable number and cannot be directly calculated from financial statements.

Gross Financing Needs (GFN)

Pervasive Misunderstanding

There is a pervasive misunderstanding of the term GFN as illustrated by recent comments by Deputy Minister of Finance Giorgos Chouliarakis (Speech to Parliamentary Subcommittee, 3 November 2016):

- GFN “consists of the total debt, both short term and long term”, and “includes treasury bills”.
- Based on GFN as a percentage of GDP, the “Greek economy surpasses the limit of 15% quite early, i.e. in the early 2030 and the 20% by early 2040. So, we have clearly an unsustainable debt, by today's standards, and always according to the assumptions made by the ESM for the growth rate of the economy, the cost of refinancing and the primary surplus.”

The GFN should be correctly calculated as debt service, fairly compared to peers, and smart management strategies suggested.

Correctly Calculate **Debt Service** and Not Confuse with **Gross Financing Needs**

- IMF Staff Guidance Note (5 Nov 2013), p.11: “the evolution of debt-service ratios provides an indication of the likelihood and possible timing of liquidity problems.” Debt service defined as principal and interest payments.
- IMF Factsheet (7 Apr 2016) discusses use of debt service.
- Greece 2016 Debt Service, which is interest expense and principal payments less rebates and deferrals, is 50% of peers:

| | | IMF Gross Financing Needs (GFN) % of GDP |
|--------------------------|----------------------------------|---|
| | Debt Service % of GDP | |
| Greece | 6% | 19% |
| Portugal | 11% | 20% |
| Ireland | 9% | 9% |
| Spain | 13% | 17% |
| Italy | 15% | 17% |
| Peer Average | 12% | 15% |
| Greece % of Peer Average | 50% | 123% |

Notes: Debt Service is 2016 estimate based on Bloomberg, EC, and IMF data; Greece adjusted for deferred interest, SMP/ANFA rebates, and interest savings related to 2016 ESM funding.

Annual Debt Service vs IMF GFN: Reconciliation Estimate for Greece 2016

| SN | | Euros | % of GFN | Notes |
|---|---|--------|----------|---|
| 1. | IMF Gross Financing Needs (GFN) | € 34.6 | 100% | SN 2 times SN 18. |
| 2. | IMF GFN % of GDP | 19% | | Source: IMF Greece DSA (June 26, 2015) Figure 1, p.19. |
| Annual Debt Service: | | | | |
| 3. | Interest Payments | € 7.1 | 20% | Derived based on IMF Greece DSA (June 26, 2015) Figure 1, p.19 data. |
| 4. | Bond and Loan Principal Payments | € 7.4 | 21% | Source: IMF Greece Fifth Review (June 2014). |
| 5. | Deferred Interest | -€ 1.3 | -4% | Deferred interest on non-financed EFSF loans at rate of 1.4%. |
| 6. | SMP/ANFA Rebates | -€ 3.5 | -10% | Rebates of interest and principal on ECB and NCB bond holdings assuming no breach of MoU. |
| 7. | Other | -€ 0.8 | -2% | Japonica estimate includes interest income, lower principal payments, and third programme/T-bill savings. |
| 8. | Annual Debt Service | € 8.8 | 26% | |
| 9. | Annual Debt Service % of GDP | 5% | | |
| Non-Annual Debt Service Reconciling Adjustments: | | | | |
| 10. | Overall Balance | € 6.5 | 19% | Source: IMF WEO Database (October 2015) accessed 30 Jan 2015. |
| 11. | T-Bills | € 14.8 | 43% | Bloomberg and PMDA bulletin. |
| 12. | Arrears | € 5.3 | 15% | Source: IMF Greece DSA (June 26, 2015) Table 1, p.7. Estimate of 75% of IMF projection. |
| 13. | Cash Buffer for Deposit Build-up | € 1.5 | 4% | IMF email 9 February 2016. |
| 14. | Net Privatization Proceeds | -€ 0.5 | -1% | IMF email 9 February 2016. |
| 15. | SMP/ANFA Rebates | € 1.9 | 5% | IMF email 9 February 2016 difference between total due and IMF projection. |
| 16. | To Be Reconciled | -€ 3.7 | -11% | In process of reconciling. |
| 17. | Adjustments Subtotal | € 25.8 | 75% | |
| 18. | Total Annual Debt Service and Adjustments | € 34.6 | 100% | Sum of SN 8 and SN 16. |
| 19. | GDP | € 182 | | Derived based on IMF Greece DSA (June 26, 2015) Figure 1, p.19 Nominal GDP Growth data and IMF WEO reported 2014 GDP. |

Gross Financing Needs **Comparative Evaluation**

The GFN ratio, which is useful in assessing liquidity, ignores basic financial statements and does not distinguish between interest and principal, creating shortcomings in assessing debt sustainability and liability management. For example, a lower GFN may be obtained when paying vastly higher interest but extending maturities (see example below).

| | | | | | | | | | | | | | | |
|-----------------------------|-------|---|-------------|-------------|-------------|-------------|---------------|-------------|-------------|-------------|-------------|-------------|-----------------|-------|
| Assumptions: | | | | | | | | | | | | | | |
| Debt | 1,000 | | | | | | | | | | | | | |
| GDP | 1,000 | | | | | | | | | | | | | |
| | | 2016 | 2017 | 2018 | 2019 | 2020 | 5-Year | 2021 | 2022 | 2023 | 2024 | 2025 | Total | |
| | | | | | | | | | | | | | Payments | |
| Alternative A: | | | | | | | | | | | | | | |
| 1. Debt Maturity (Years) | 20 | (Due in final year) | | | | | | | | | | | | |
| 2. Interest Rate | 10% | | | | | | | | | | | | | |
| 3. Principal Payment | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4. Interest Payment | | 100 | 100 | 100 | 100 | 100 | | 100 | 100 | 100 | 100 | 100 | 100 | 1000 |
| 5. GFN | | 100 | 100 | 100 | 100 | 100 | 500 | 100 | 100 | 100 | 100 | 100 | 100 | 1,000 |
| 6. GFN/GDP | | 10% | 10% | 10% | 10% | 10% | | 10% | 10% | 10% | 10% | 10% | 10% | |
| Alternative B: | | | | | | | | | | | | | | |
| 7. Debt Maturity (Years) | 5 | (Constant amortization and refinancing) | | | | | | | | | | | | |
| 8. Interest Rate | 5% | | | | | | | | | | | | | |
| 9. Principal Payments | | 100 | 100 | 100 | 100 | 100 | | 100 | 100 | 100 | 100 | 100 | 100 | 1,000 |
| 10. Interest Payment | | 50 | 50 | 50 | 50 | 50 | | 50 | 50 | 50 | 50 | 50 | 50 | 500 |
| 11. GFN | | 150 | 150 | 150 | 150 | 150 | 750 | 150 | 150 | 150 | 150 | 150 | 150 | 1,500 |
| 12. GFN / GDP | | 15% | 15% | 15% | 15% | 15% | | 15% | 15% | 15% | 15% | 15% | 15% | |
| Alternative A vs. B: | | | | | | | | | | | | | | |
| 14. Delta (Amount) | | | | | | | -250 | | | | | | | -500 |
| 15. Delta (%) | | | | | | | -50% | | | | | | | -50% |

IMF Latest DSA Projections for Greece and Peers

| | <u>2016</u> | <u>2017</u> | <u>2018</u> | <u>2019</u> | <u>2020</u> | <u>IMF Source</u> |
|-------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------------|
| Gross Financing Needs % GDP: | | | | | | |
| Greece | 17.9% | 19.1% | 16.3% | 13.0% | 8.2% | May 2016 |
| Portugal | 19.6% | 14.9% | 16.9% | 18.3% | 22.3% | August 2015 |
| Spain | 17.3% | 17.4% | 16.9% | 16.3% | 16.2% | August 2015 |
| Italy | 20.4% | 16.9% | 16.4% | 16.1% | 14.0% | July 2016 |
| Ireland | 8.5% | 6.8% | 7.4% | 10.2% | 13.0% | March 2015 |
| Primary Balance % of GDP: | | | | | | |
| Greece | -0.5% | 0.3% | 1.5% | 1.5% | 1.5% | May 2016 |
| Portugal | 1.8% | 1.9% | 1.8% | 1.8% | 1.8% | August 2015 |
| Spain | -0.6% | -0.1% | 0.2% | 0.7% | 0.7% | August 2015 |
| Italy | 1.5% | 1.8% | 2.4% | 3.1% | 3.4% | July 2016 |
| Ireland | 1.5% | 2.4% | 3.0% | 3.0% | 2.9% | March 2015 |

Section C. Worst Practices

5. Multi-Decade Projections of Government Debt are Highly Prone to Political and Lender Bias

Multi-Decade DSA Projections

Undermine Trust & Confidence

1. Discourages and indeed prevent focus on balance sheet management and changes in Taxpayers' equity.
2. Puts focus on non-accountable years.
3. Given geometric compounding, long-dated outputs can be used to create numbers at opposite ends of the spectrum.
4. Track records of inability to accurately forecast even 24 months out highlight inability to project further.
5. Non-transparency of supporting excel models creates distrust and lack of confidence, and can hide key drivers.
6. Multi-decade projections for pensions generally accepted but not for highly complex organizations with many drivers.
7. Prohibits peer comparisons.

DSA Market Interest Rate Formula Linked to a Meaningless Future Face Value of Gross Debt

- Despite acknowledging the FFV of Greek government debt is “not a meaningful proxy”, the FFV is used to project future interest rates
- The FFV formula and compounding over many decades make market interests one of the most powerful drivers of output.
- Not applying the same FFV model to peers hides the huge flaw of DSA formula.

Greece IMF 2060 Projection Comparison

| | May 2016 DSA | | 12 May 2016 DSA | | 26 Jun 2015 | June 2014 |
|------------------------------|---------------------|-----------------|---------------------|-----------------|-----------------|-----------------|
| | Publicly Released | | Leaked | | DSA | Fifth Review |
| | <u>Restructured</u> | <u>Baseline</u> | <u>Restructured</u> | <u>Baseline</u> | <u>Baseline</u> | <u>Baseline</u> |
| Debt to GDP | 100% | 250% | 106% | 294% | 100% | 60% |
| Gross Financing Needs | 20% | 200% | 20% | 67% | 22% | 12% |

IMF DSA Historical Comparison: Summary Metrics

| | | May 2016 <u>Public</u> <i>Restructured</i> (2024 Data) | May 2016 <u>Leaked</u> <i>Baseline</i> (2024 Data) | June 2015 <u>Public</u> <i>Baseline</i> (2024 Data) | June 2014 <u>Public</u> <i>Baseline</i> (2022 Data) |
|--|--|--|--|---|---|
| 1. GDP | | € 235 | € 236 | € 246 | € 257 |
| 2. Debt (FFV) | | € 375 | € 382 | € 330 | € 302 |
| 3. Debt/GDP | | 159% | 162% | 134% | 118% |
| 4. Interest | | € 5 | € 15 | € 11 | € 11 |
| 5. Revenue | | € 98 | € 98 | € 103 | € 109 |
| 6. Interest/Revenue | | 5% | 15% | 11% | 10% |
| 7. PB/Revenue | | 4% | 4% | 8% | 9% |
| 8. PB/GDP | | 1.5% | 1.5% | 3.5% | 4.0% |
| 9. GFN/GDP | | 9% | 17%* | 13% | 6% |
| 10. GDP Growth Rate | | 3.3% | 3.3% | 3.7% | 3.9% |
| 11. Δ in GDP / Δ in Debt | | 93% | 86% | 399% | -384% (Debt Decrease) |

*Estimate based on May 2016 Public DSA Figure 2 chart.

Debt Hump 2022/2023: Analysis

Overview: In yet another example of not correctly calculating the Greek government debt numbers, a reported 2022 payment of deferred interest has been incorrectly calculated, overstated, and contributing to the wide spread of Greek government bonds over Portugal government bonds.

Consistent with industry standard and customary practices the deferred interest is added to principal and earns compounded interest. As the EFSF loan is amortizing, the math insights on amortizing this deferred amount once the deferral stops can be found in several documents and confirmed with primary sources.

- The ESM 2014 annual report, page 30.
- EC First Review December 2012, page 53.
- Master Financial Assistance Facility Agreement, page 56-57.
- IMF DSA 26 June 2015, page 3.

2022 Debt Hump **Excel Error**

| Year | TBills | ANFA | Bonds excl SMP, ANFA, Hold, Sec/n | HOLD | Securitisati on | SMP | Swaps | BOG LOANS | EIB LOANS | Private Sector | EFSF | GLF | IMF | REPO | new loans | Total |
|------|-------------|-------------|---|-------------|--------------------|---------------|-------------|------------|-------------|-------------------|----------------|---------------|---------------|-------------|---------------|----------------|
| 2015 | 322,131,434 | 344,188,797 | 836,417,679 | 108,074,021 | 480,798 | 1,035,487,932 | 736,392,224 | 41,523,732 | 316,761,359 | -124,608,927 | 585,585,580 | 283,796,881 | 881,524,653 | 437,339,295 | | |
| 2016 | 297,166,730 | 283,560,447 | 1,155,356,129 | 100,078,165 | 370,924 | 772,361,739 | 711,850,718 | 24,091,543 | 301,328,100 | -130,056,592 | 733,027,574 | 302,287,669 | 1,180,833,704 | 482,743,833 | 170,603,901 | 6,385,604,584 |
| 2017 | 296,874,600 | 254,000,845 | 1,155,731,763 | 74,605,068 | 337,456 | 718,814,916 | 666,506,125 | 30,921,942 | 287,647,837 | -146,723,626 | 833,997,396 | 400,734,763 | 1,251,823,521 | 340,282,028 | 0 | 6,165,554,634 |
| 2018 | 296,874,600 | 181,533,686 | 1,087,567,087 | 54,738,211 | 358,670 | 544,678,392 | 598,365,700 | 30,037,788 | 277,402,200 | -154,924,503 | 931,601,291 | 550,812,258 | 1,322,150,224 | 327,181,944 | 109,415,371 | 6,157,792,919 |
| 2019 | 308,162,231 | 154,414,935 | 1,089,971,785 | 55,015,798 | 161,411 | 486,366,978 | 576,978,124 | 31,829,940 | 267,931,960 | -159,638,171 | 1,014,580,938 | 736,809,323 | 1,321,457,818 | 327,181,944 | 29,185,199 | 6,240,410,213 |
| 2020 | 350,783,796 | 91,872,622 | 887,479,106 | 53,549,823 | | 191,820,385 | 535,634,429 | 31,334,886 | 256,986,799 | -164,505,026 | 1,085,597,825 | 932,613,718 | 1,203,894,051 | 328,078,333 | 172,902,444 | 5,958,043,191 |
| 2021 | 384,494,586 | 77,302,706 | 1,079,741,846 | 53,902,717 | | 121,052,435 | 537,113,298 | 26,976,013 | 243,272,407 | -169,526,432 | 1,135,548,562 | 1,050,494,209 | 944,888,787 | 327,181,944 | 151,051,828 | 5,963,494,906 |
| 2022 | 417,953,651 | 77,364,209 | 1,272,004,586 | 54,296,739 | | 121,056,818 | 537,049,506 | 20,113,153 | 225,959,566 | -174,713,951 | 17,840,124,015 | 1,121,929,129 | 680,004,761 | 327,181,944 | 199,703,486 | 22,720,027,612 |
| 2023 | 441,581,726 | 32,124,355 | 1,271,891,974 | 54,735,132 | | 89,242,994 | 537,167,540 | 10,844,106 | 207,282,280 | -180,072,568 | 6,730,799,262 | 1,150,875,775 | 407,339,450 | 327,181,944 | 655,642,209 | 13,735,636,209 |
| 2024 | 452,806,664 | 32,196,982 | 1,194,816,375 | 55,200,415 | | 89,248,169 | 603,966,304 | | 188,160,579 | -185,607,098 | 7,532,651,747 | 1,123,354,368 | 188,475,745 | 328,078,333 | 1,059,090,966 | 12,662,439,549 |

Section C. Worst Practices

6. Financial Asset Mismanagement and Non-Disclosure

Analysis Indicates that **€69 Billion**, or on Average **€625 Million Per Week**, of Greece Government Asset Value was Lost from 2014 to August 2016

| <u>SN</u> | <u>Greek Government</u> | <u>2014</u> | <u>2016</u> | <u>Identified Value Lost</u> | |
|-----------|------------------------------|--------------|--------------|------------------------------|---------------------------|
| | | | | <u>Amount</u> | <u>Percentage of 2014</u> |
| 1 | Financial Assets | €109 Billion | €71 Billion | €40 Billion | 37% |
| 2 | Non-Financial Assets | €115 Billion | €86 Billion | €29 Billion | 25% |
| 3 | Total Assets | €224 Billion | €157 Billion | €69 Billion | 31% |
| 4 | Value Lost Per Week | | | €625 Million | |
| 5 | Value Lost Per Greek Citizen | | | € 6,275 | |

Notes: Japonica Partners collaborative analysis. Identified Value Lost may differ from change in Financial Assets due to additions and disposals. From 30 June 2014 to 3 August 2016 or closest date of data available. Per week calculation based on 109 weeks. Based on population of 10.9 million from EC AMECO database and unconsolidated general government financial asset data from Eurostat (accessed 3 August 2016). Non-Financial Assets estimate based on data from Japonica Partners 30 April 2016 USC Global Leadership Summit presentation: mostimportantreform.info/MAGARIAN_USC_20160430.pdf.

Greece Government Identified Financial Asset Value Lost from 2014 to August 2016

| <u>SN</u> | <u>Identified items</u> | <u>Financial Asset Value Lost</u> | |
|-----------|---|-----------------------------------|----------------|
| 1. | Pre-2015 Recap Bank Equity | € 19,400 | Million |
| 2. | SMP/ANFA Rebates | € 7,010 | Million |
| 3. | Unlisted Shares (excl. Bank CoCos and Supranational Entities) | € 4,296 | Million |
| 4. | Deficit Spending: 30 Jun 2014 - 3 Aug 2016 | € 3,807 | Million |
| 5. | 2015 Bank CoCos | € 1,718 | Million |
| 6. | Listed Shares (excl. Bank Shares) | € 1,093 | Million |
| 7. | 2015 Recap Bank Equity | € 848 | Million |
| 8. | Late Payment Directive 2011/7/EU | € 730 | Million |
| 9. | PSI GGBs | € 654 | Million |
| 10. | 2014 GGB Issues | € 103 | Million |
| 11. | Identified Financial Asset Value Lost | € 39,658 | Million |

Notes: Japonica Partners collaborative analysis. From 30 June 2014 to 3 August 2016 or closest date of data available. Based on unconsolidated general government financial asset data is from Eurostat accessed 3 August 2016.

Section C. Worst Practices

7. Don't Use or Misuse Peer Comparisons

Why are Greek Government Bond Yields so Much Higher than Cyprus and Portugal? It's not the Debt. It's not the Need for More Debt Relief. It's not QE. And, it's not the Credit Ratings. Could it be a **Lack of Trust and Confidence** in Greek Leadership and Crying Wolf for More Debt Relief Claiming the Country is Bankrupt?

| | | <u>Greece</u> | <u>Portugal</u> | <u>Cyprus</u> |
|----|---------------------------------|---------------|-----------------|---------------|
| | Bond Yields: | | | |
| 1. | 10-Year YTM | 6.88% | 3.58% | 3.49% |
| 2. | 3-Year YTM | 6.77% | 0.95% | 1.38% |
| 3. | T-Bill Yield-at-Issue | 2.97% | -0.01% | 0.31% |
| | | | | |
| 4. | Net Debt % of GDP (2015) | 45% | 79% | 49% |
| | | | | |
| 5. | QE Eligible | No | Yes | No |
| | | | | |
| | Credit Ratings: | | | |
| 6. | Moody's | Caa3 | Ba1 | B1 |
| 7. | DBRS | CCCH | BBBL | B |
| 8. | Fitch | CCC | BB+ | B+ |
| 9. | Standard & Poor's | B- | BB+ | BB |

Notes: YTM data from Bloomberg as of 25 November 2016. T-Bill data is yield-at-issue from most recent sale (Portugal: 1 year, Cyprus: 3 month, Greece: 6 month). Net Debt calculated under the direction of Japonica Partners as IPSAS/IFRS debt valued according to IPSAS 29/IFRS 39 less financial assets (excluding accounts receivable); debt calculation based on EC, ESM, and IMF data and financial assets data from Eurostat; data accessed 11 November 2016.

Γιατί οι Αποδόσεις των Ελληνικών Κρατικών Ομολόγων είναι τόσο πολύ υψηλότερες από αυτές των Κυπριακών και Πορτογαλικών; Δεν οφείλεται στο Χρέος. Ούτε στην Ποσοτική Χαλάρωση. Ούτε στις Αξιολογήσεις Πιστοληπτικής Ικανότητας. Μήπως οφείλεται στην Έλλειψη Εμπιστοσύνης προς την Ελληνική Ηγεσία, καθώς και στο Πρόσχημα για Αξίωση Μεγαλύτερης Ελάφρυνσης του Χρέους Υποστηρίζοντας ότι η Χώρα είναι Πτωχευμένη;

| | | <u>Ελλάδα</u> | <u>Πορτογαλία</u> | <u>Κύπρος</u> |
|----|---|---------------|-------------------|---------------|
| | Απόδοση κρατικών ομολόγων: | | | |
| 1. | Δεκαετές, Απόδοση μέχρι τη Λήξη | 6,88% | 3,58% | 3,49% |
| 2. | Τριετές, Απόδοση μέχρι τη Λήξη | 6,77% | 0,95% | 1,38% |
| 3. | Έντοκα Γραμμάτια Δημοσίου Απόδοση κατά την Έκδοση | 2,97% | -0,01% | 0,31% |
| | | | | |
| 4. | Καθαρό χρέος (2015) | 45% | 79% | 49% |
| | | | | |
| 5. | Επιλέξιμα για το πρόγραμμα Ποσοτικής Χαλάρωσης | Όχι | Ναι | Όχι |
| | | | | |
| | Αξιολογήσεις Πιστοληπτικής Ικανότητας: | | | |
| 6. | Moody's | Caa3 | Ba1 | B1 |
| 7. | DBRS | CCCH | BBBL | B |
| 8. | Fitch | CCC | BB+ | B+ |
| 9. | Standard & Poor's | B- | BB+ | BB |

Σημειώσεις: Σημείωση: Τα στοιχεία περί της απόδοσης των ομολόγων μέχρι τη λήξη προέρχονται από το Bloomberg από την 11 Νοέμβρη 2016. Τα στοιχεία για την απόδοση κατά την έκδοση των έντοκων γραμματίων δημοσίου προέρχονται από την πιο πρόσφατη πώληση (Πορτογαλία: 1 έτος, Κύπρος: 3 μήνες, Ελλάδα: 6 μήνες). Το Καθαρό Χρέος υπολογίστηκε με βάση τα IPSAS/IFRS υπό τη διεύθυνση της Jaronica Partners, ως το χρέος που αποτιμάται σύμφωνα με τα πρότυπα IPSAS 29/IFRS 39 μείον τα χρηματοοικονομικά περιουσιακά στοιχεία (εξαιρουμένων των εισπρακτέων λογαριασμών), ο υπολογισμός του χρέους έγινε με βάση τα στοιχεία της ΕΚ, του ΕΜΣ και του ΔΝΤ, καθώς και με βάση τα δεδομένα των χρηματοοικονομικών περιουσιακών στοιχείων της Eurostat, η πρόσβαση στα εν λόγω δεδομένα είναι της 11 Νοέμβρη 2016.

Greece Government 2014 New Bond Issue Rates and **Spreads vs. Portugal**

| | <u>Date</u> | <u>Maturity</u> | <u>Greece Government Bond Yield</u> | <u>Portugal Government Bond Yield</u> | <u>Spread</u> |
|----|-------------------------|-----------------|-------------------------------------|---------------------------------------|---------------|
| 1. | 10 April 2014 | 2019 | 4.95% | 2.53% | 2.42% |
| 2. | 25 Nov 2016 | 2019 | 6.77% | 0.95% | 5.82% |
| 3. | Current if 2014 Spread | 2019 | 3.37% | 0.95% | 2.42% |
| 4. | Interest Penalty | | 3.40% | | |
| 5. | 10 July 2014 | 2017 | 3.50% | 1.90% | 1.60% |
| 6. | 25 Nov 2016 | 2017 | 4.86% | -0.08% | 4.94% |
| 7. | Current if 2014 Spread | 2017 | 1.53% | -0.08% | 1.60% |
| 8. | Interest Penalty | | 3.33% | | |

Section C. Worst Practices

8. Preventing Best Practice Implementation

Accounting Failed Attempts History

*Greece has had **seven failed attempts** at implementing government accrual accounting:*

- 1: 1992** – Greek Ministry of Economy pushes for accrual accounting
- 2: 1998** – Presidential Decree for double-entry accounting systems for public bodies and institutions.
- 2003 – Public hospitals in Greece to implement accrual accounting
- 3: 2005** – Greece law passed for public entities to use IAS (IFRS)
- 2006 – SEV publicly supports adoption of IPSAS
- 2008 – EC recommends, unofficially, that Greece implement IPSAS
- 4: 2009 (March)** – Greece self-reports to OECD that it has full accrual based financial statements
- 2009 – Greece big four accounting firms plus locals form IPSAS committee
- 2010 – IPSAS Greece government training of low level employees started (not Minister or MP level)
- 2011 – IPSAS Greece government training stopped prior to certification exams
- 5: 2011/12** – IPSAS Greece projects started
- 2012 (April) – IPSAS conference in Athens
- 2013 – IPSAS Greece projects stopped with expiration of funds
- 2014 (June) – Public tender for computer accrual accounting systems pending
- 6: 2014 (December)** – For the fifth time, Government again promises to adopt IPSAS “next year” ignoring that implementation could start today
- 7: 2015 (May)** – MoF announces intention to adopt IPSAS, forms committee, but no tangible results.

Greece Continues to Omit Disclosing the Present Value of Government Debt as Required in EDP Notification Table 4, Item 4

“In case of substantial differences between the face value and the **present value of government debt**, please provide information on: (i) the extent of these differences; (ii) the reasons for these differences.”

The answers provided by Greece in the table below are qualitative, not quantitative: (i) “Market value of securities much lower than nominal value”; (ii) “Economic crisis”.

4 In case of substantial differences between the face value and the present value of government debt, please provide information on

i) the extent of these differences:

Market value of securities much lower than nominal value

ii) the reasons for these differences:

Economic crisis

CRA Comments on Greece are Not Corrected with Internationally Comparable Debt Numbers

DBRS: (10 June 2016) Using conventional stock analysis, Greece gross general government debt to GDP is extremely high at **176.9%, the highest in the Eurozone**. First two risks of lower rating cited: political uncertainty and structural reform implementation. Most distant projections 2030.

Fitch: (16 September 2016) Debt to GDP is **177% in 2015, the second highest of all Fitch-rated companies**. First two risks of lower rating cited: deterioration in creditor relations and programme and economic performance. Most distant projections 2024.

Moody's: (14 October 2016) Debt to GDP **176.9% in 2015, one of the highest debt burdens in the universe of Moody's-rated countries**. First two risks of lower rating cited: failure to implement 3rd programme and wider political or social turmoil. Most distant projections 2017.

S&P: (22 July 2016) Debt to GDP will peak at **179%, the highest of all the sovereigns we rate**. First two risks of lower rating cited: government doesn't implement reforms and prolonged non-implementation of ESM program. Most distant projections 2019.

Section D.
Necessary **First Steps** to Winning
Trust & Confidence
(Εμπιστοσύνη & Αξιοπιστία)

Pick Your Government **Role Models** for Winning Trust & Confidence

The governments **most respected** for management and disclosure and winning trust & confidence include, New Zealand, The UK, Canada, and the Swiss.

The government often cited as the **least respected** for winning trust & confidence include, Ecuador, Venezuela, Cuba, Russia, and Italy.

Designate the 1st Senior Government Official with Decades of Successful Relevant Finance and Management Experience

1. Greece currently has no senior level ministers with professional **turnaround, financial, or accounting** experience.
2. **Senior leadership must take ownership** and win the trust and confidence of key stakeholders with transparency and accountability of government financial management.
3. **Designate the 1st senior government official** with decades of successful experience in finance, accounting, and management who can convincingly educate key stakeholders (including government officials and their staff) and disclose the government's consolidated opening balance sheet.

Terms for Senior Individual Designated to Winning Trust & Confidence with Financial Management and Disclosure

- Internationally recognized, multi-decade long track record of success in winning trust and confidence with financial management and disclosure, especially the government's consolidated opening balance sheet.
- Appointment should be supported by the Institutions.
- Appointment should be pro bono (without compensation).
- The appointee should have no political or legislative responsibilities or powers.

Brazil and Argentina Demonstrate Market Benefits of Professional Management Teams

- Brazil: Government appoints **“real superstars”** to finance team. (FT, May 2016)
- Argentina: Argentina now has the **“best economic policy teams”** in Latin America. (FT, April 2016)
 - Within 50 days of legal settlement receive almost \$70 billion in orders and sold \$16.5 billion in bonds including 30-year bonds.

Advice of Successful Implementers of Government Financial Management and Disclosure

A most important reform for Greece to build trust and confidence is to implement and use international accounting/audit standards and disclose the government's consolidated opening balance sheet.

- BALL, Ian – Executive responsible for implementing **New Zealand** government accrual accounting system during the New Zealand financial turnaround.
- BALLS, Ed - Shadow chancellor and key individual in implementing the **UK** Whole of Government financial statements.
- BERGMANN, Andreas - Chairman of IPSAS board and Professor and Director Public Sector at the Zurich University of Applied Sciences School of Management and Law. **Switzerland**.
- FRASER, Sheila - Executive responsible for auditor oversight during the **Canada** government financial turnaround.
- SOLL, Jacob - The most highly respected **historian** on government accounting and author of *The Reckoning: Financial Accountability and The Rise and Fall of Nations*.
- WALKER, David - Comptroller General for the **United States of America** under two presidents.

Greek Statistics Reputation that Undermine Trust & Confidence Must be Changed

In the country that is responsible for the term "Greek statistics" to refer to government numbers that provide a false picture of reality, international public sector accounting standards and disclosure of the government's consolidated opening government balance sheet could not be more important.

What Happens To Greece When?

- The next global or EU crisis hits?
- When hedge funds attack Greek bonds and short equity markets sending prices on CDS and yields on GGBs to the sky?
- The next government major accounting scam and/or error is disclosed?
- Turkey and Egypt aggressively seek to regain tourist market share by offering below market prices?
- The EC dramatically cuts back the €6 billion in funds given to Greece annually?
- When QE stops?

Do you really believe it cannot get much worse?

From 2001 to 2015, Greece Added **Only 10 Cents** in GDP for Each Additional Euro of Debt, Compared to EZ Peer Average 45 Cents

(€, Billions)

| | | | Peer | Peer Countries | | | |
|----|------------------------------|--------|---------|----------------|-------|-------|----------|
| SN | GDP Increase / Debt Increase | Greece | Average | Ireland | Italy | Spain | Portugal |
| 1 | Historical (2001 - 2015) | 10% | 45% | 58% | 42% | 55% | 27% |
| 2 | Forecast (2015 - 2017) | 42% | 184% | 365% | 90% | 95% | 187% |
| 3 | Forecast / Historical | 428% | 406% | 633% | 217% | 173% | 680% |

| SN | Metric | PSI Adjusted 2001-15 Delta | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 | 2005 | 2004 | 2003 | 2002 | 2001 |
|----|-----------------------------|-------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | GDP | 23.8 | 176.0 | 177.6 | 180.4 | 191.2 | 207.0 | 226.0 | 237.5 | 242.0 | 232.7 | 217.9 | 199.2 | 193.7 | 178.9 | 163.5 | 152.2 |
| 2 | Gross Debt - EDP FFV | 243.3 | 311.5 | 319.7 | 320.5 | 305.1 | 356.3 | 330.6 | 301.1 | 264.8 | 239.9 | 225.6 | 214.0 | 199.3 | 181.5 | 171.4 | 163.0 |
| 3 | GDP Δ / Debt Δ (Annual) | | 19% | NM | -70% | NM | -74% | -39% | -12% | 37% | 104% | 161% | 38% | 83% | 153% | 134% | 93% |
| 4 | GDP Δ / Debt Δ (Cumulative) | 10% | 16% | 16% | 18% | 27% | 28% | 44% | 62% | 88% | 105% | 105% | 92% | 114% | 144% | 134% | |

Notes: EC AMECO data accessed 12 August 2016. Greece Gross Debt Delta 2001-2015 adjusted for PSI.
Analysis using gross national income in process.

Start with the **1ST Steps** to Win Trust & Confidence

1. Pick the globally most respected **role models**.
2. **Designate the 1st** senior government official with decades of successful relevant finance and management experience.
3. Disclose the government's consolidated **opening balance sheet**.

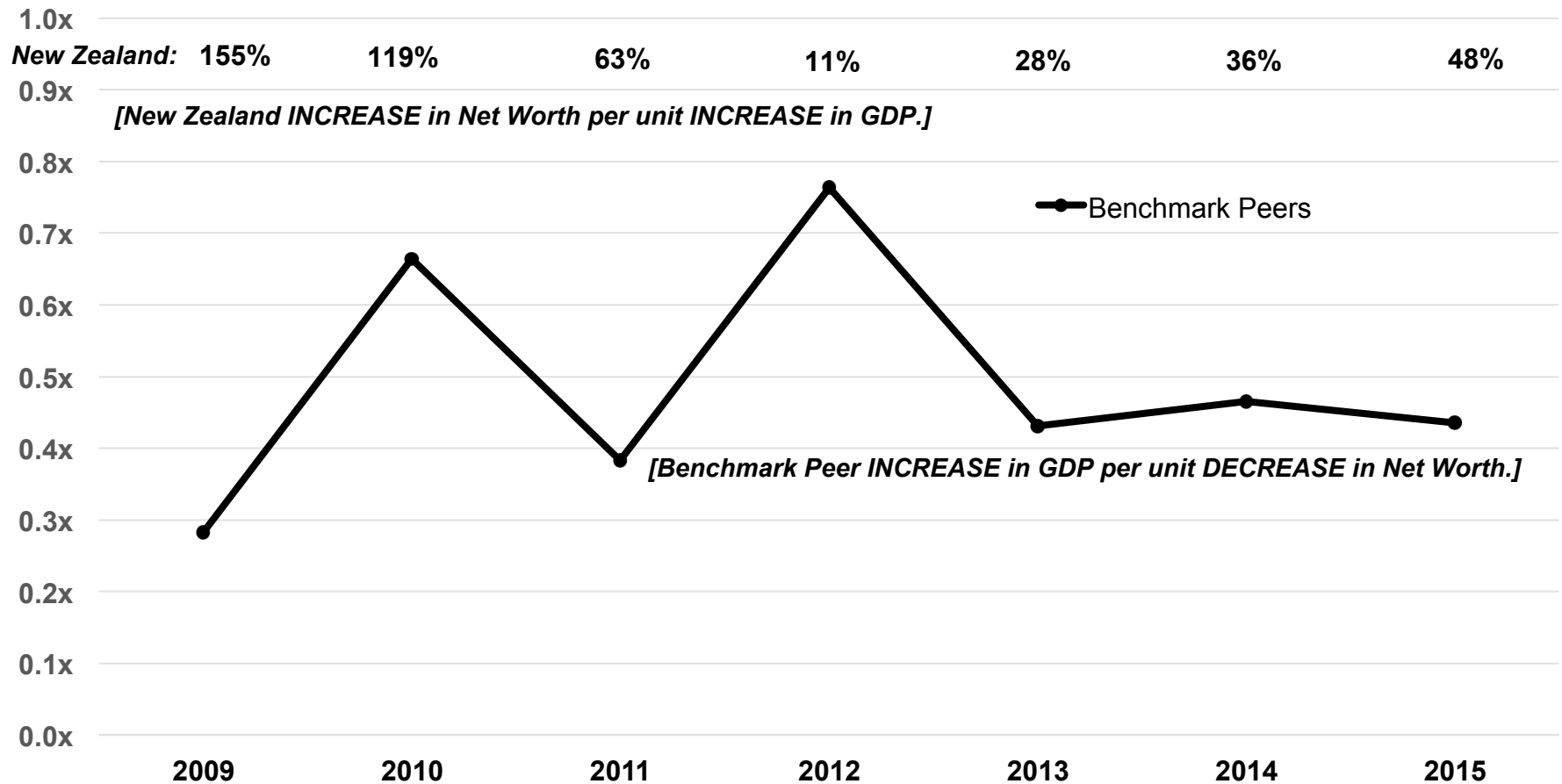
TRUST & CONFIDENCE

Εμπιστοσύνη & Αξιοπιστία

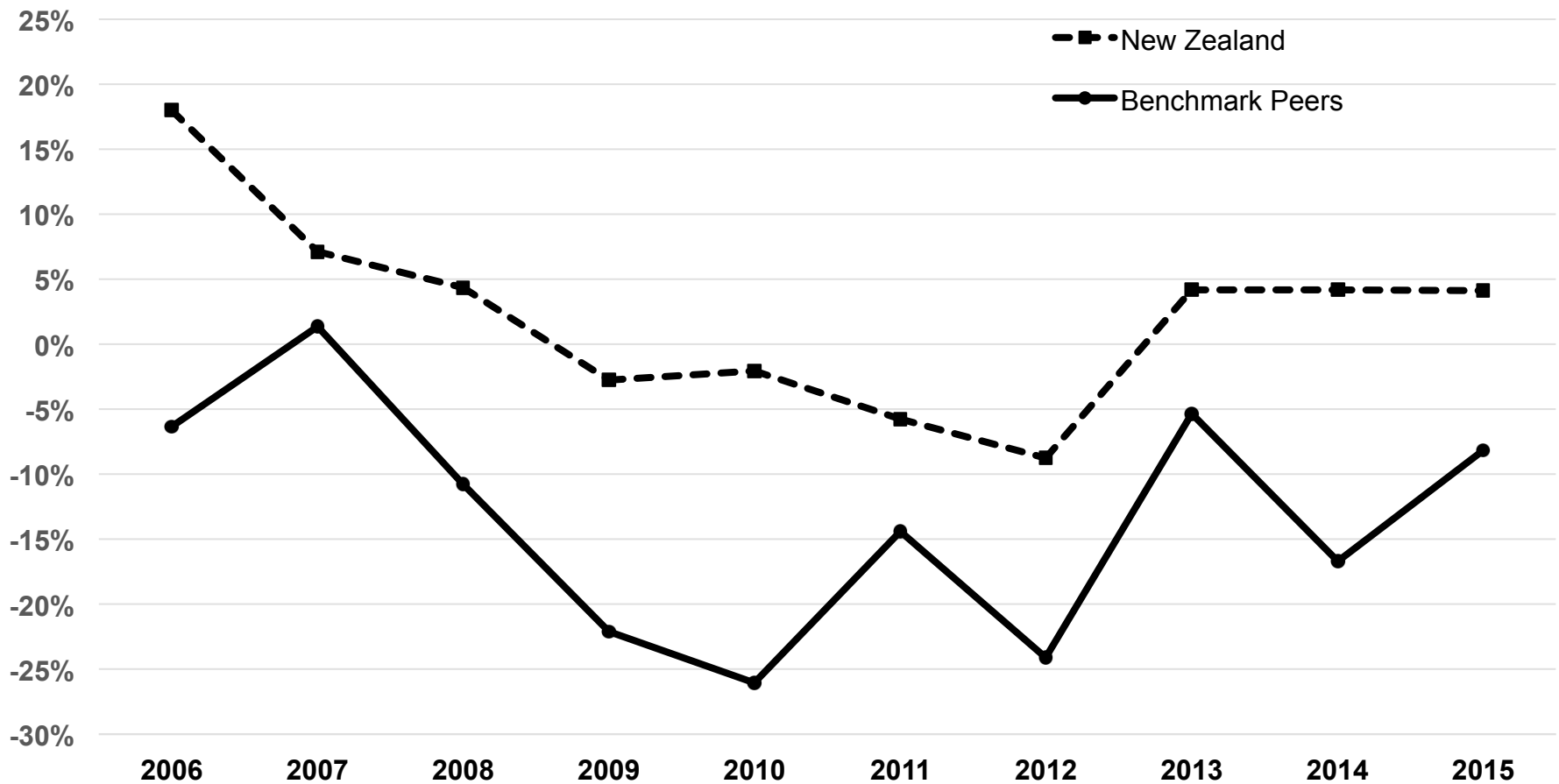
Appendices

- New Zealand KPIs
- Greek Parliament Reports on Government Debt Obligations
- Michael Pence Indiana and USA

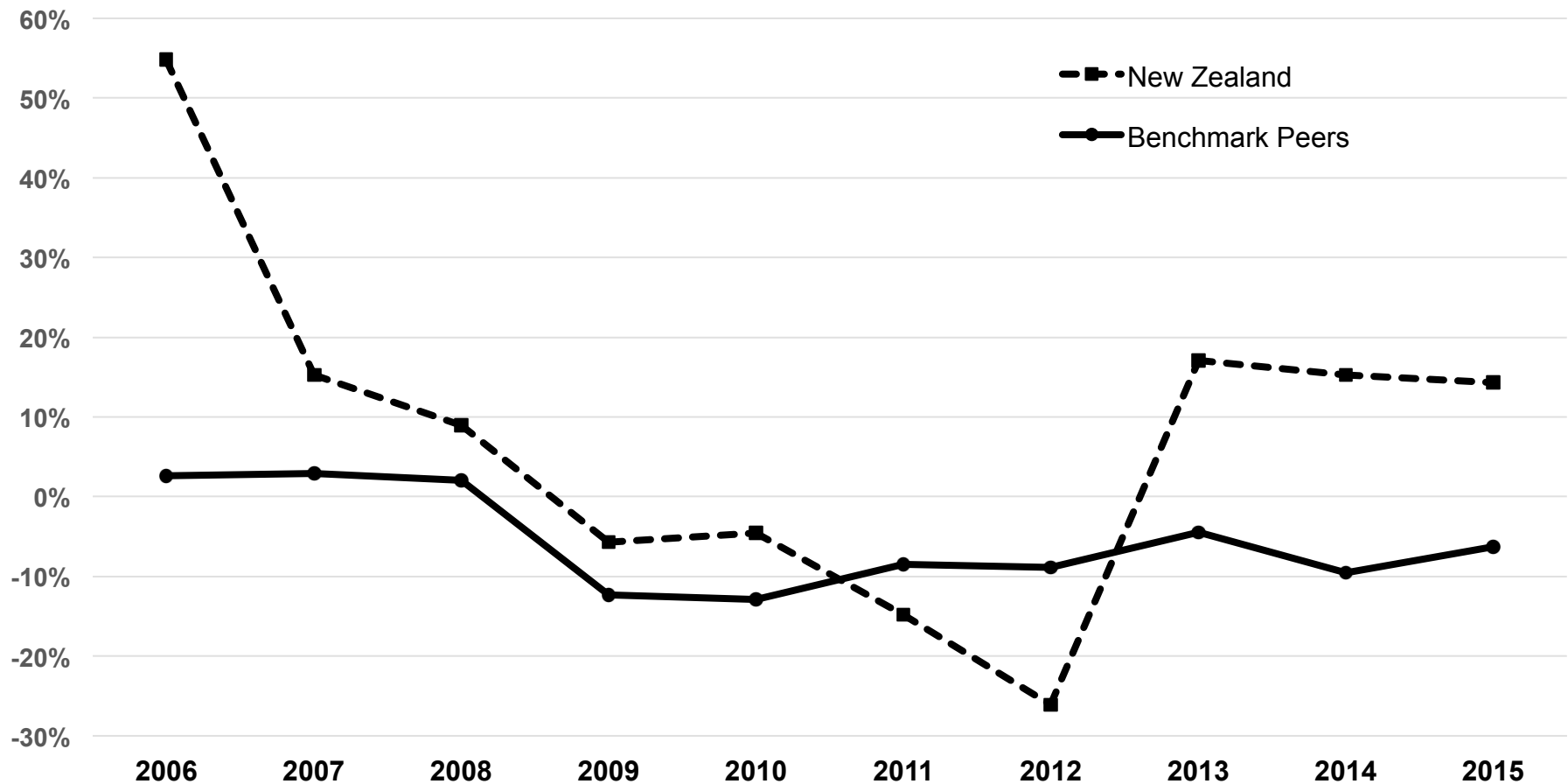
Value Creation Ratio: New Zealand Averaged 70% Increase in Net Worth per Unit Increase in GDP vs. Benchmark Peer Average of 0.5x Increase in GDP per Unit Decrease in Net Worth (2009-2015)



Return on Assets: New Zealand Averaged 2% vs. Benchmark Peers Average of -13% (2006-2015)



Net Worth Annual % Change: New Zealand Averaged 7% vs. Benchmark Peers Average of -6% (2006-2015)



Greek Parliament Report on Government Debt Obligations

- **TRUTH COMMITTEE ON PUBLIC DEBT**
- Established on April 4, 2015 by decision of the President of the Hellenic Parliament who confided the Scientific Coordination of its work with Dr. Eric Toussaint (aka Mr. Ecuador odious debt).
- In sum, **ALL Greek government debt** is determined to be **illegitimate, odious, illegal, and unsustainable.**
- **August 2015 MOU** is illegal, illegitimate, and odious from second report (with Hellenic Parliament logo but without committee member citations).

Michael Pence as Governor of Indiana (to be Vice-President of the USA)

- Indiana has the one of if not the best government **financial statements** consistent with international public sector accounting standards.
- Indiana has one of the best **financial performances** and balance sheets of any state.
- Indiana focuses on **government net worth** (total government assets less total government liabilities).
- The new vice president has years of conviction and knows the importance of managing government balance sheets and will be **a beacon of light** in winning trust and confidence.

For FY 2015, on a government-wide basis, total assets of the State of Indiana exceed liabilities (Net Position/Taxpayers' Equity**) by \$11.3 billion, which is a **20% increase** from 2014.**

Michael R. Pence, Governor. 30 June, 2015.

(USD, billions; 2015 fiscal year data)

| | <u>Assets</u> | <u>Liabilities</u> | <u>Net Worth</u> | <u>GDP</u> | <u>Net Worth as % of GDP</u> |
|------------|----------------------|---------------------------|-------------------------|-------------------|---|
| Indiana | 28.6 | 17.3 | 11.3 | 336.4 | 3% |
| California | 238.7 | 279.6 | -41.0 | 2,459.7 | -2% |
| Illinois | 59.8 | 180.8 | -121.0 | 766.7 | -16% |
| New York | 155.4 | 122.103 | 33.3 | 1,436.8 | 2% |